

Illustrated Catalog of



Extracting, Operating, and Mechanical

FORCEEPS

Lancets, Root Extractors, Scissors, Shears, Pliers, Etc.

Manufactured by

THE S. S. WHITE DENTAL MFG. CO.

Chestnut Street, Corner Twelfth, PHILADELPHIA

BRANCHES

NEW YORK: Spangler Building, 5, 7,
and 9 Union Sq., W.; Charles
Building, Madison Ave., cor 43d St.
BOSTON: Walker Building
CHICAGO: Atlas Building
BROOKLYN: Nassau Building
ATLANTA: Grant Building
ROCHESTER: Chamber of Com-
merce

NEW ORLEANS: Maison Blanche
CINCINNATI: First National Bank
Building
SAN FRANCISCO: Butler Building
OAKLAND: Oakland Bank of Sav-
ings Building
LOS ANGELES: Mason Building
TORONTO (Can.): Confederation
Life Building
MONTREAL (Can.): Birk's Building

EUROPEAN BRANCH: BERLIN, W., Mauerstrasse 83-84

The Story of a Defective



EVERY pair of forceps which bears the trade-~~XX~~-mark is put through a mechanical test in our factories subjecting it to a strain far more severe than it would ever be subjected to in proper use. Yet, talking recently with the foreman of the Forceps shop he said, "There is not the slightest doubt that the Forceps will stand twice as severe a test. Why, look here," and he went to a box of forceps thrown back by the inspectors for one cause or another and pulled out a pair at random. They proved to be No. 65, which as everybody knows have long, thin, bayonet-shaped beaks. Examining them a moment, he found the defect which had condemned them, a slight flaw near the joint, so slight, in fact, it had to be pointed out to the writer the second time before he saw it.

"This pair of forceps," said the foreman, "is defective. In all reason it ought not to stand as much as a perfectly sound pair. We'll put it to the test and see." It was put through the regular test, 100 lbs. pressure on the handles with the beaks gripping a piece of bone like a tooth. Of course, there was no sign of giving way.

"Now we'll add 50 lbs. strain to the test." The 50 lbs. were added, and the forceps came through without harm.

"Well, we'll try it again with 50 lbs. more added." Again the test was applied, this time with 200 lbs. pressure, double the regular strain, and again the forceps were unaffected.

"Now we'll see if we can't 'bust' 'em," said the foreman. "If they do break, there will be no loss, anyway." The full power of which the machine is capable, more than two and one-half times that put upon these forceps in the regular tests, was applied, and once more the defective, condemned forceps showed their metal and their temper. They refused to be broken.

As a final experiment the beaks were gripped onto a piece of bone about 3-16 inch thick and 5-8 inch wide, and the handles brought together with the full power of the machine as before. What happened? The beaks simply bit their way through the bone, taking out a section of it.

Even after this neither beaks nor handles showed any signs of the ordeal through which they passed. No human hand could apply the power that was applied by the machine.

It is because we know these things, know how our Forceps are made, what they are made of, and what they will do, that we say unhesitatingly, they are the best in the world.

Extracting Forceps, Root Extractors, Etc.

Collectively the Extracting Instruments illustrated and described in this Catalog constitute the most complete line made by any manufacturer. Individually, the Forceps, Root Extractors, etc., are unequaled elsewhere in material, temper, finish, and adaptation to the special use for which they are intended.

Smooth Beaks for Forceps

Our Extracting Forceps are made with smooth or unserrated beaks, except the Knuckle-joint Forceps.

Mechanical and sanitary reasons combine against the use of serrated beaks, and a large proportion of the dental profession prefer the smooth beaks.

Mechanical Advantages of Smooth Beaks

The holding power of Extracting Forceps depends largely upon the adaptation of the forms of the beaks to the particular class of teeth or roots they are designed to grasp. Smooth beaks properly adapted hold perfectly with the least possible danger of crushing the roots.

Then again smooth beaks must inevitably be much stronger than those with serrations cut in them.

In applying Forceps the smooth beaks present the best possible surface to slip up the root, and in many cases the double wedge force exerted by simply pressing the handles together will result in the extraction of the tooth without the necessity of pulling an ounce.

The beaks of all our forceps have been carefully shaped in accordance with these principles. Serrations would render them less effective.

Sanitation Favors Smooth Beaks

There is also the objection that beaks with serrations are less readily cleansed than those which are smooth; they are consequently more likely to become infected with septic matter.

For these reasons, our regular stock Forceps are made with smooth beaks.

Forceps with serrated beaks will be supplied to order only.

Special Adaptations

Necessarily some of the forms have delicate beaks suited to the work for which they are intended. It is possible in such cases to apply sufficient force at the handles to break the beaks. Forceps, especially those of this conformation, should be restricted to the special work for which they are designed. There are certain numbers, notably Nos. 73, 74, 75, 76, 77, 99, and 100, with which this caution must be observed.

Knuckle-joint Forceps, English Style

The advantages claimed for this form of Extracting Forceps are smaller bulk, and the absence of angles about the joints. Made in twenty-nine patterns including all the most desirable. Look for the trade  mark on the English style of forceps and get the best.

Our Warranty Holds Good

Our line of Smooth-beaked Extracting Forceps comprises over one hundred and twenty forms, the twenty-nine Knuckle-joint Forceps bring the total up to about one hundred and fifty. Every pair is tested before being placed on sale as severely as any forceps should be in practice. We know that they are the best Forceps made, and we engage, if they prove soft, so as to bend in use, or are broken in consequence of a palpable flaw, to give a new pair for those found defective if returned to us within a reasonable time after purchase.

The Common-sense Forceps

Patented January 16, 1894

The Common-sense Forceps are so called because they embody the "common-sense" philosophy of extraction. They contain many modifications both in beaks and handles, all tending to make the operation of extraction easier to both operator and patient.

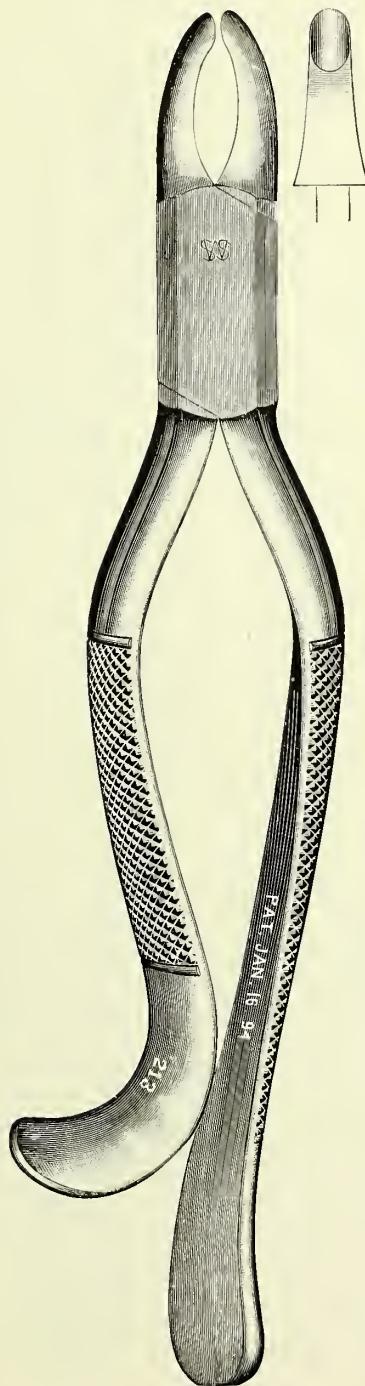
First, as to the handles: Observe these are not at all in the same plane with the beaks, but are in all cases canted over and given a twist to the right, the hooks of the hooked handles receiving a downward pitch. The effect is to make the handles fit the hand perfectly. The "fork" of the handles is spread somewhat abruptly to afford the forefinger room or to give the thumb a vantage point in pushing the forceps to place on the tooth. The ends of straight handles are thickened and rounded to prevent the bruising of the palm in pushing, and the inner edges of all handles are rounded for a similar reason.

The beaks have a curved holding surface, adapting them to grip firmly, without any tendency to rock or slip, the roots of the various classes of teeth. The ends of the beaks are made slightly lanciform, to facilitate the penetration of the alveolar process. The entire conformation of the beaks tends ordinarily to transform the operation of extraction into a lifting out of the tooth by the mere compression of the Forceps handles. When tractive force is applied, the immovable grasp of the curved bearing behind the cervical eminence of the enamel is of the greatest help to the operator, enabling him to apply the force exactly as seems desirable.

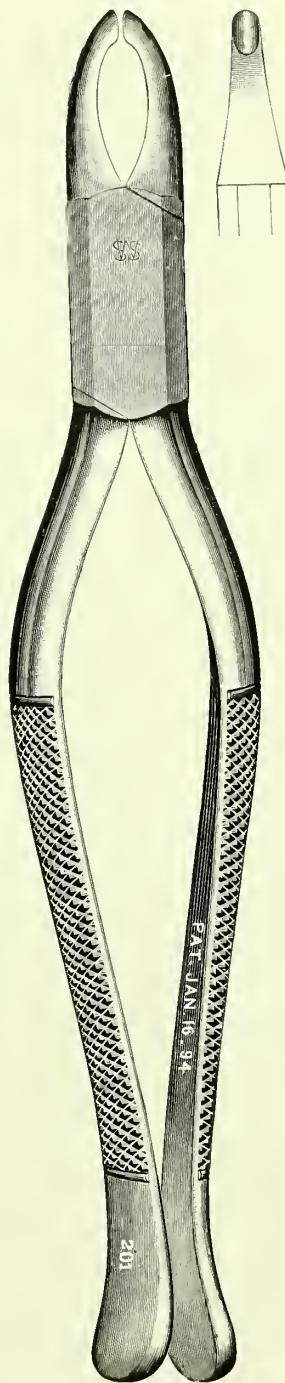
The eighteen pairs of Common-sense Forceps, illustrated and described on pages 3 to 10, were carefully designed to cover the needs of ordinary practice, and years of practical use demonstrates that they very completely meet their designer's intention.

The Common-sense Forceps

PATENTED JANUARY 16, 1894



No. 213. Central Incisor and Canine, Upper. Either Side



No. 201. Lateral Incisor, Bicuspid, and Root, Upper. Either Side

Nos. 201, 213 each \$3.00

Common-sense Forceps—Continued



No. 203. Incisor and Single Root, Lower. Either Side

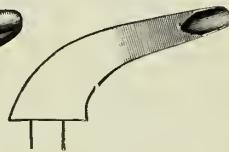
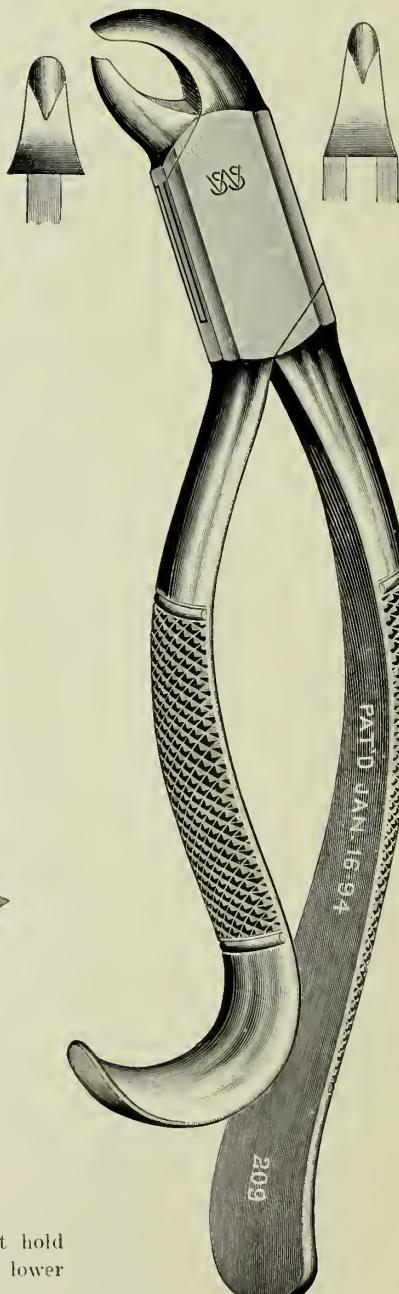
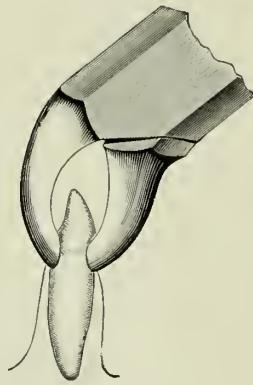


Fig. A



No. 209. Incisor and Bicuspid, Lower. Either side

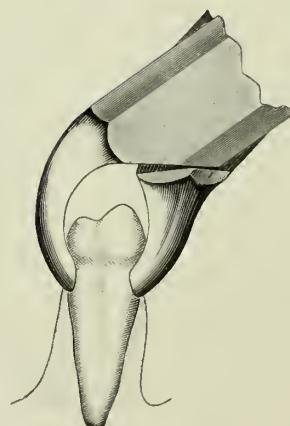
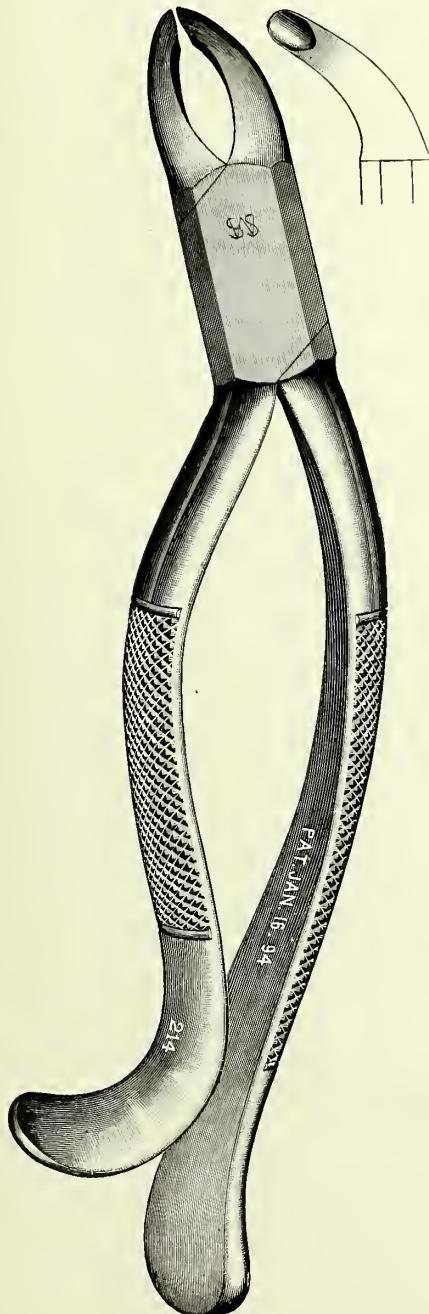


Fig. B

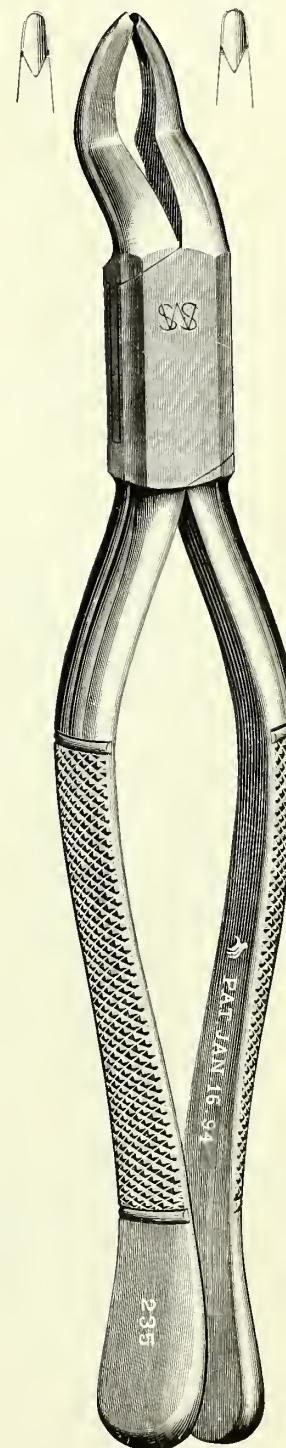
Figures A and B show the perfect hold which No. 209 takes on the small lower incisors or even large bicuspids.

Nos. 203, 209 each \$3.00

Common-sense Forceps—Continued



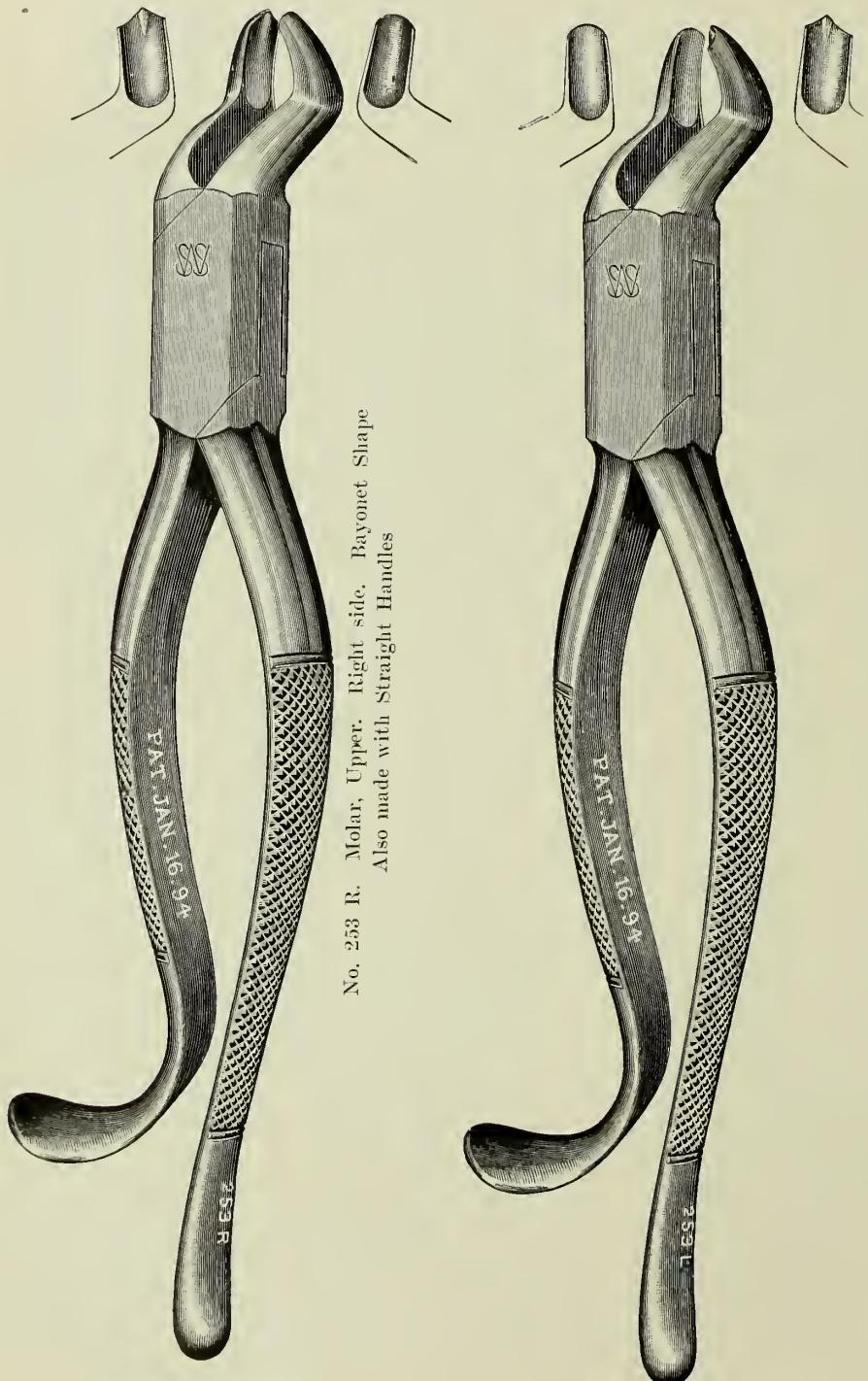
No. 214. Cuspid and Bicuspid, Lower. Either side



No. 235. Bicuspid and Single Root, Upper. Bayonet Shape

Nos. 214, 235 each \$3.00

Common-sense Forceps—Continued

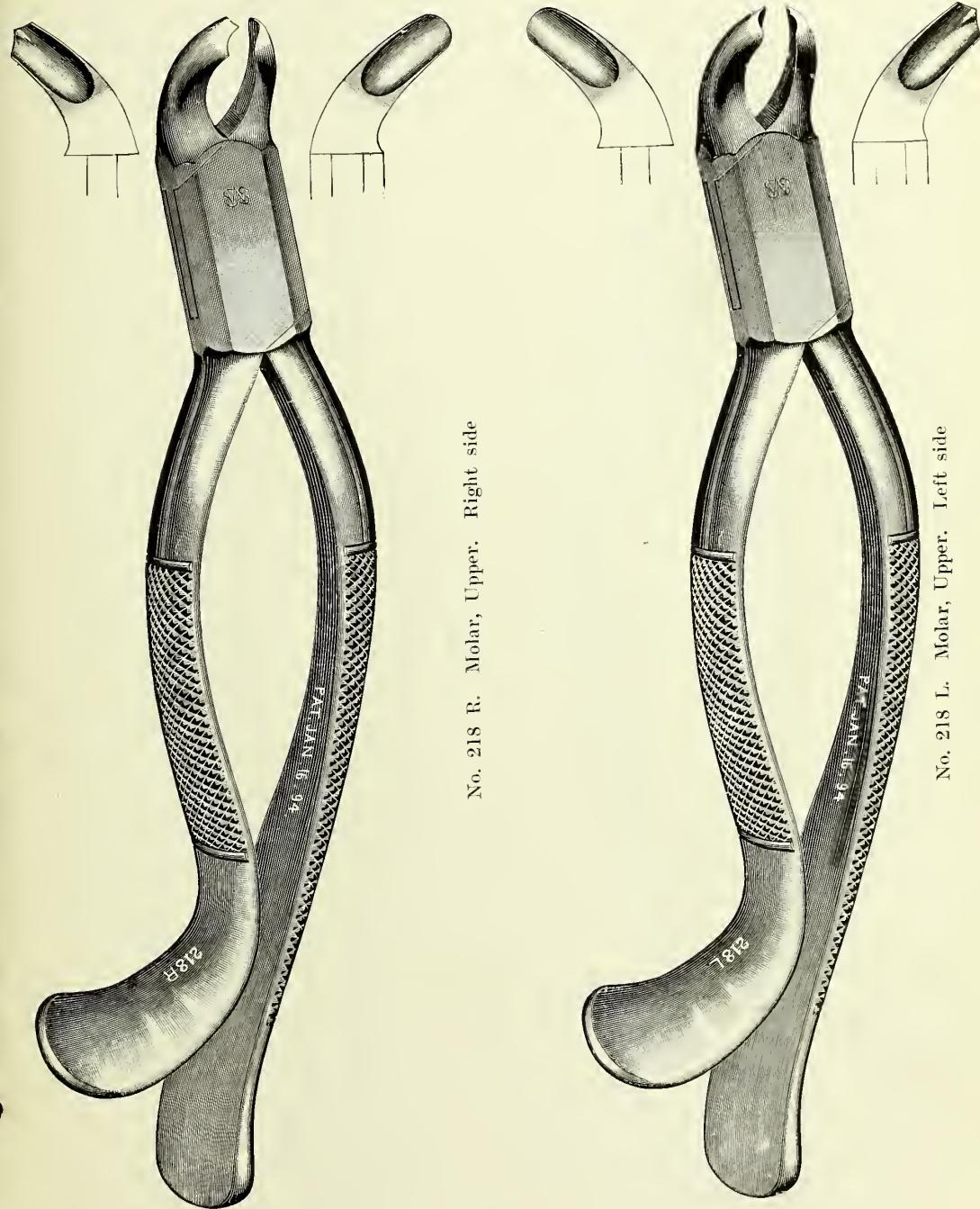


No. 253 R. Molar, Upper. Right side. Bayonet Shape
Also made with Straight Handles

No. 253 L. Molar, Upper. Left side. Bayonet Shape
Also made with Straight Handles

Nos. 253 R, 253 L (Hook or Straight Handles) each \$3.00

Common-sense Forceps—Continued

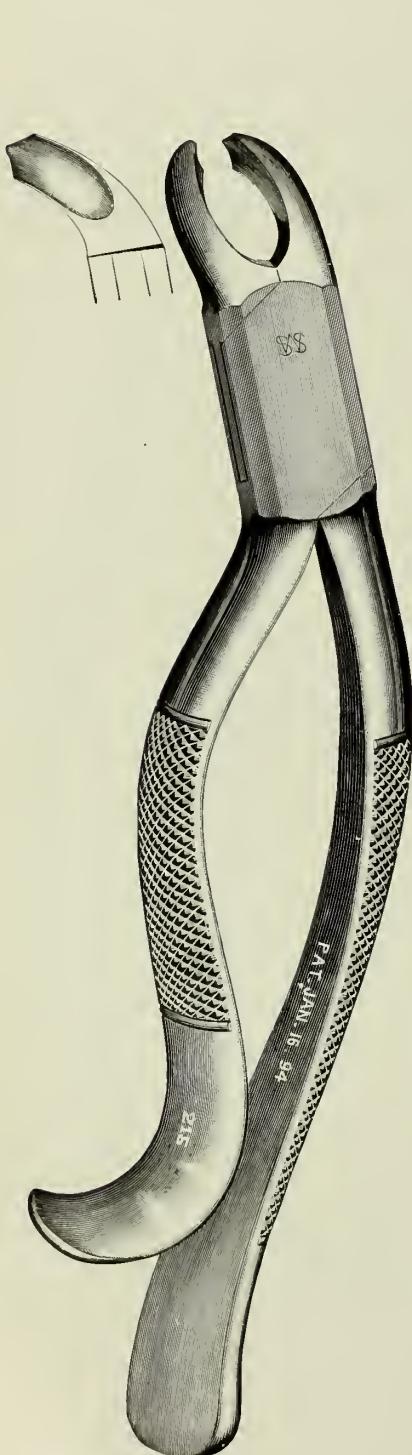


No. 218 R. Molar, Upper. Right side

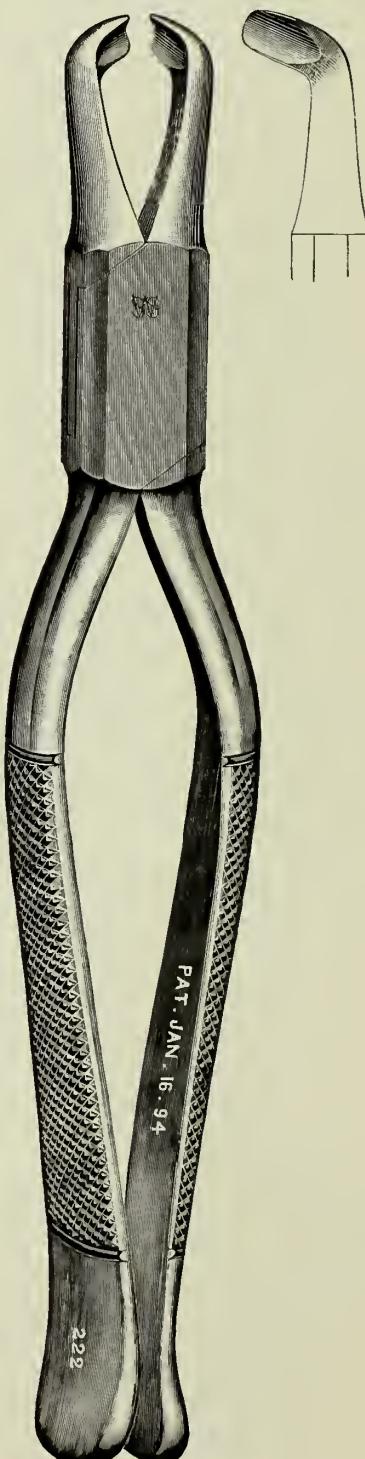
No. 218 L. Molar, Upper. Left side

Nos. 218 R, 218 L each \$3.00

Common-sense Forceps—Continued



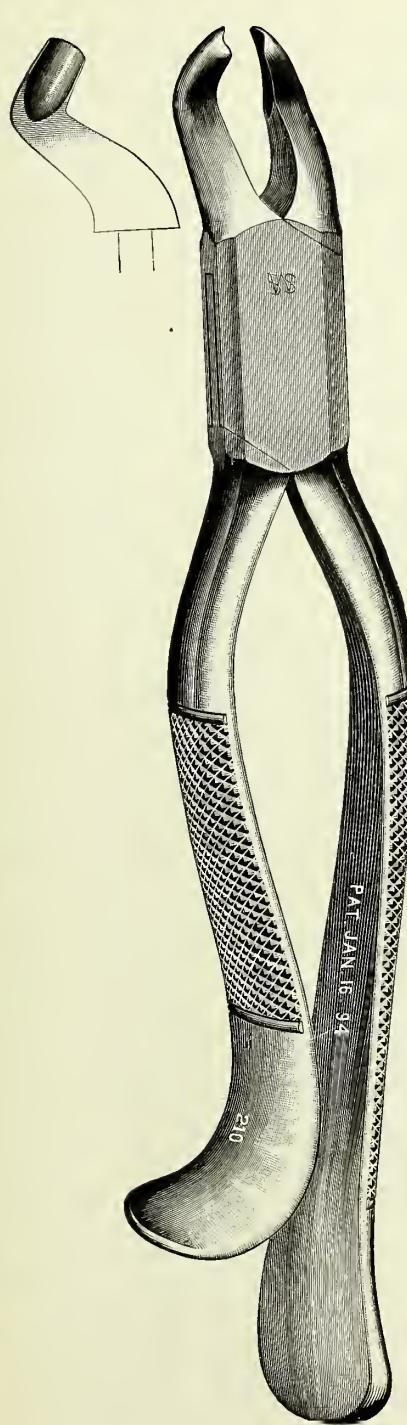
No. 215. Molar, Lower. Either side



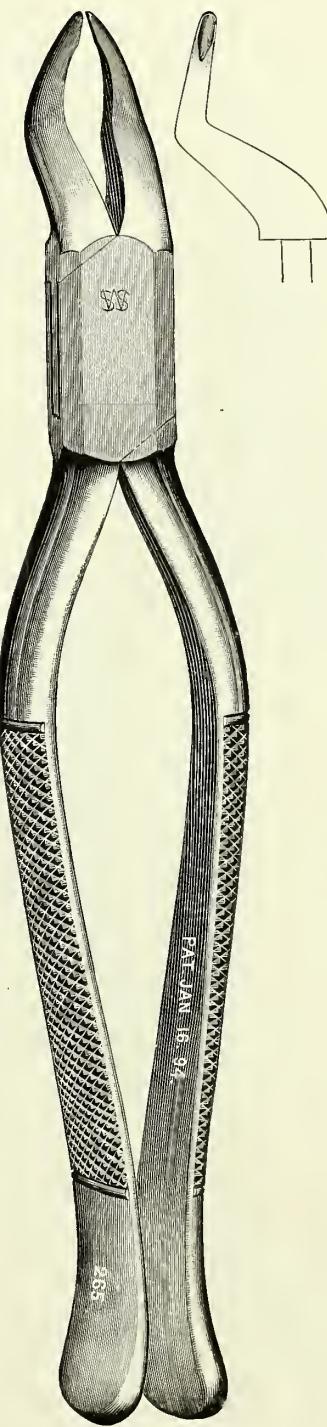
No. 222. Third Molar, Lower. Either side

Nos. 215, 222 each \$3.00

Common-sense Forceps—Continued



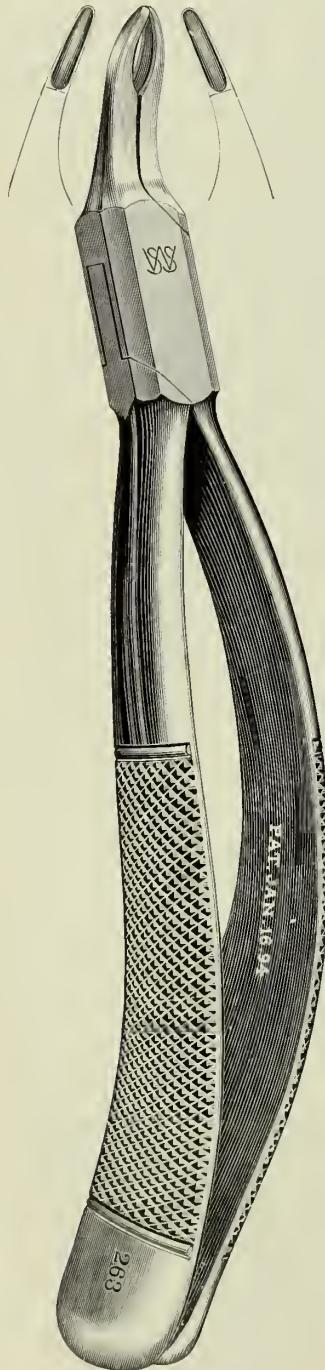
No. 210. Third Molar, Upper. Either side



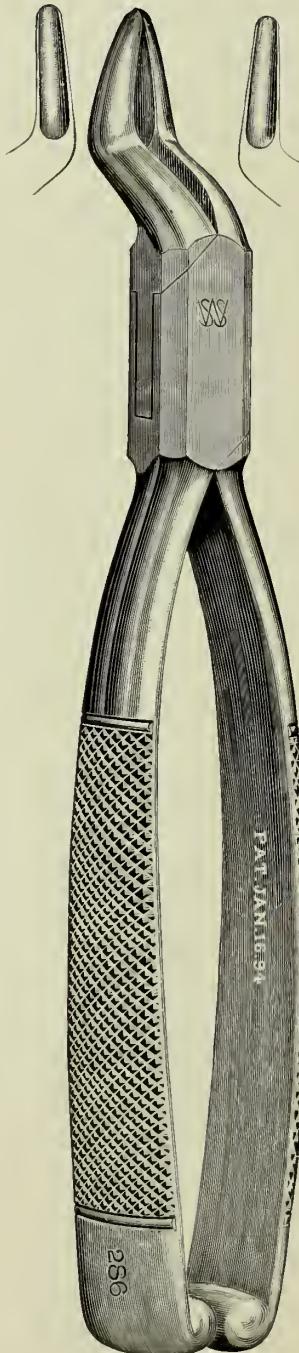
No. 265. Root and Spina, Upper. Bayonet Shape

Nos. 210, 265 each \$3.00

Common-sense Forceps—Continued



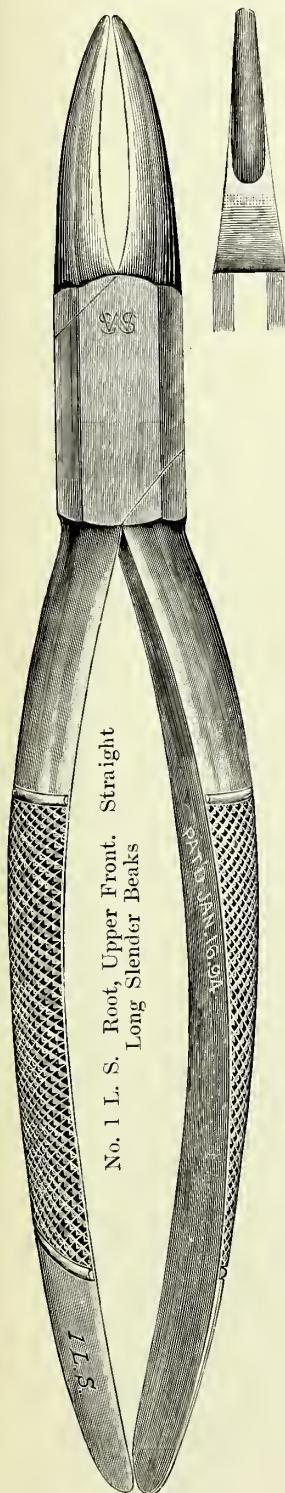
No. 263. Root and Specula
Beaks modified by Dr. R. H. Reeves



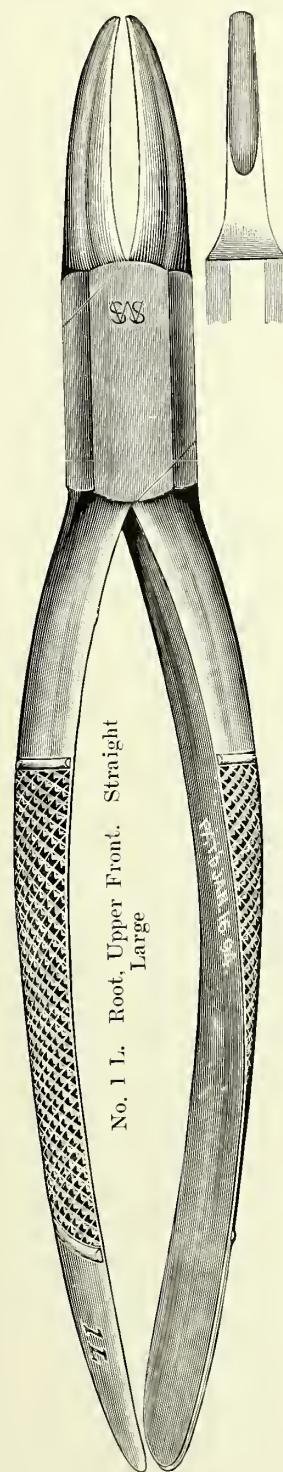
No. 286. Root, Upper. Bayonet Shape
The ends of the handles are rounded to fit the palm of the hand, so that the beaks may
be readily forced between the root and the alveolus
Designed by Dr. Henry L. Dorr

Nos. 263, 286 each \$3.00

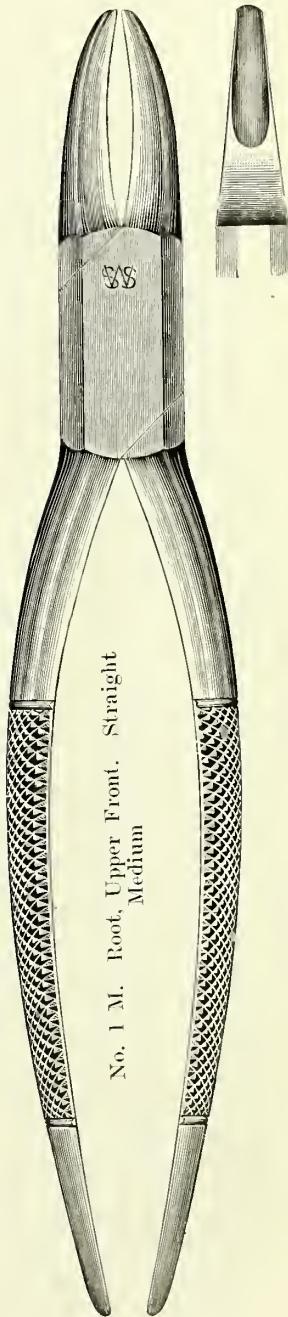
Root Forceps



No. 1 L. S. Root, Upper Front. Straight
Long Slender Beaks



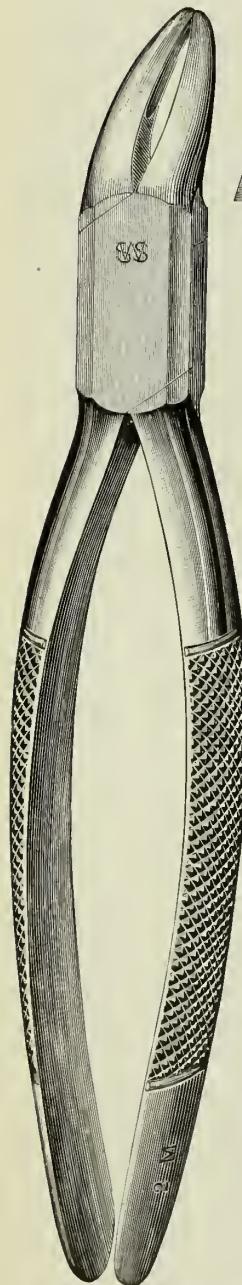
No. 1 L. Root, Upper Front. Straight
Large



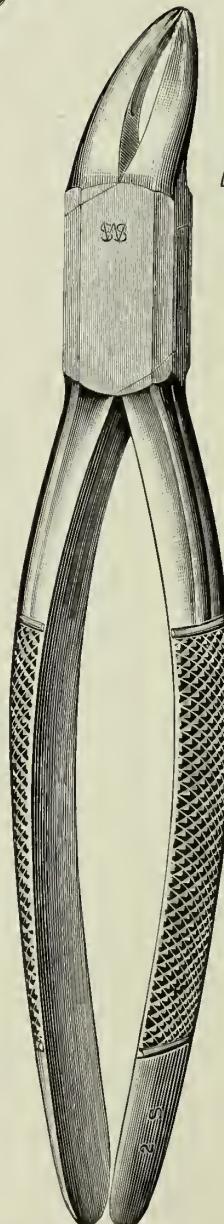
No. 1 M. Root, Upper Front. Straight
Medium

No. 1, all sizes each \$2.50

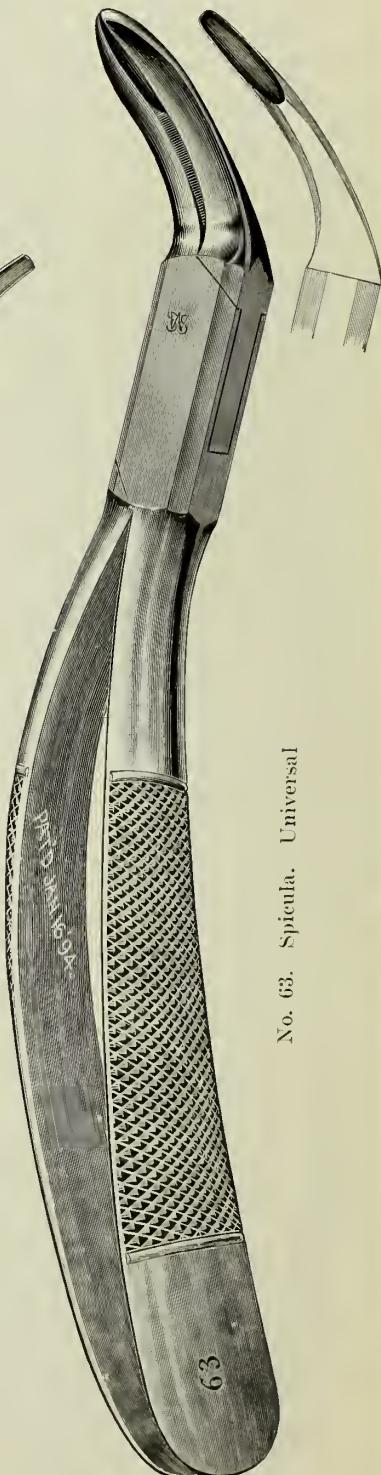
Root Forceps



No. 2 M. Root, Upper or Lower. Half Curved
Medium



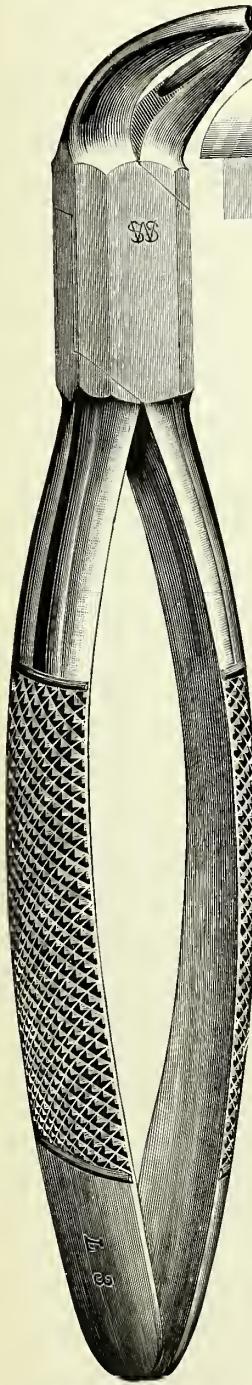
No. 2 S. Root, Upper or Lower. Half Curved
Small



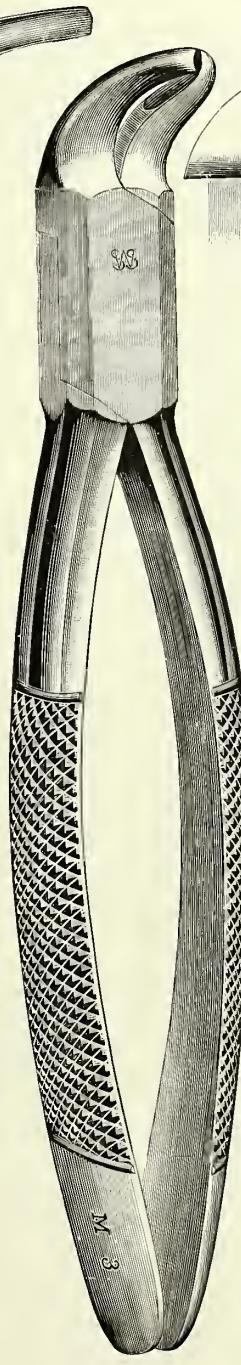
No. 63. Spicula. Universal

Nos. 2 M, 2 S, 63 each \$2.50

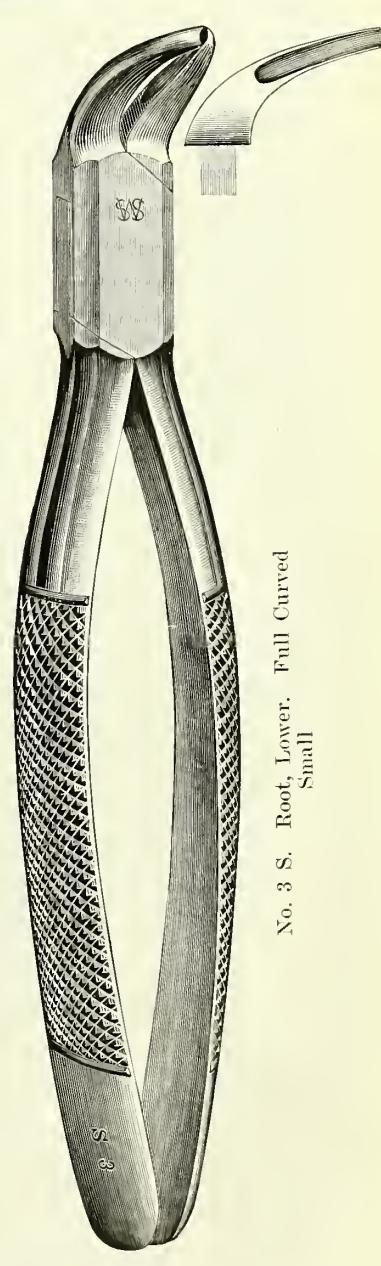
Root Forceps



No. 3 L. Root, Lower. Full Curved
Large



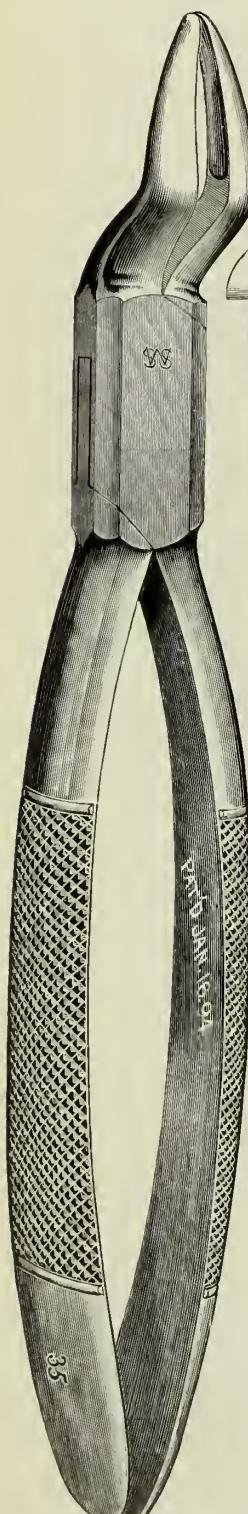
No. 3 M. Root, Lower. Full Curved
Medium



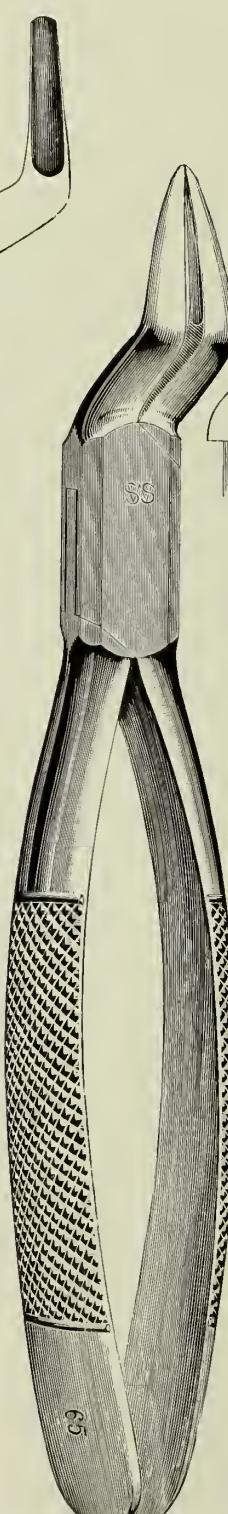
No. 3 S. Root, Lower. Full Curved
Small

No. 3, all sizes each \$2.50

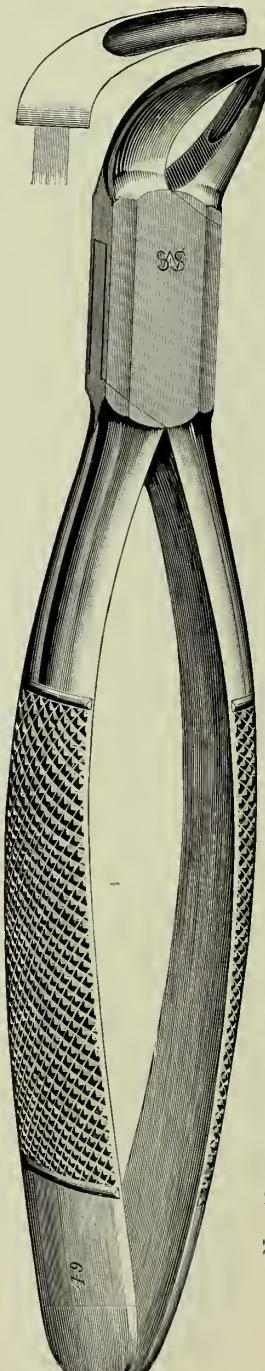
Root Forceps



No. 35. Root, Upper. Bayonet Shape



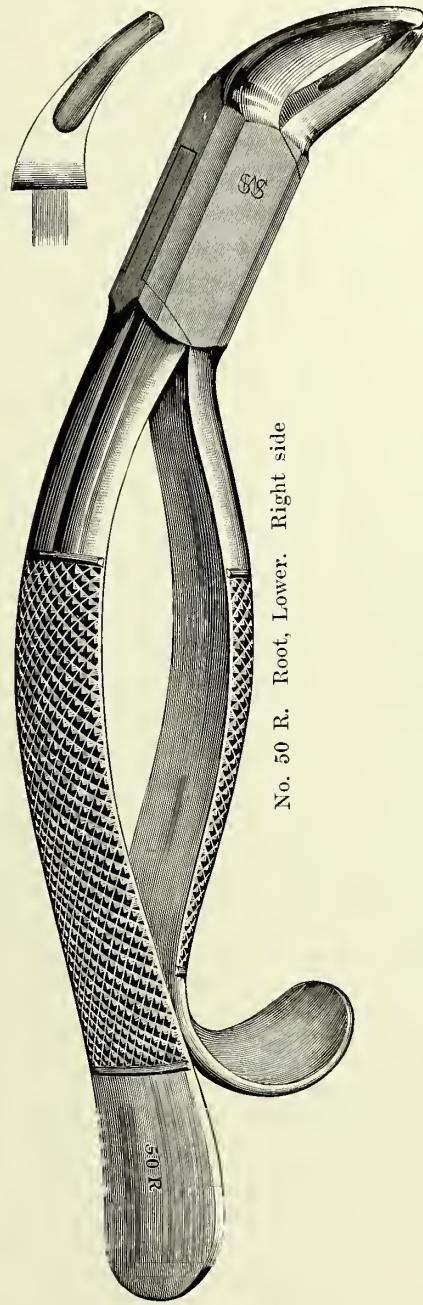
No. 65. Root, Upper. Bayonet Shape. Slender Beaks
For difficult roots in upper jaw, and roots of front teeth in lower jaw
Designed by Dr. B. F. Arrington



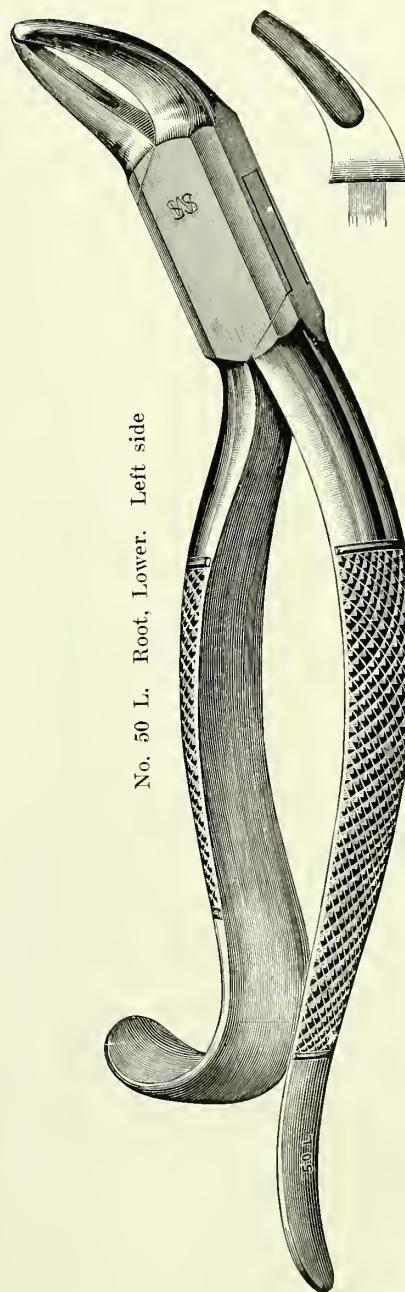
No. 49. Root, Lower Molar. Either side. And for extracting lower molars
with crowns liable to fracture under direct application of the Forceps

Nos. 35, 65, 49 each \$2.50

Root Forceps



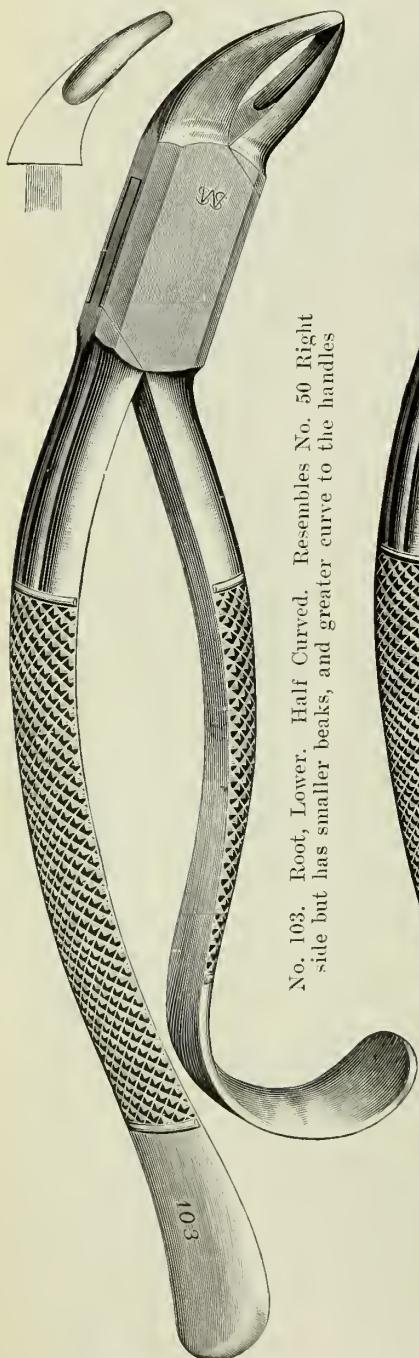
No. 50 R. Root, Lower. Right side



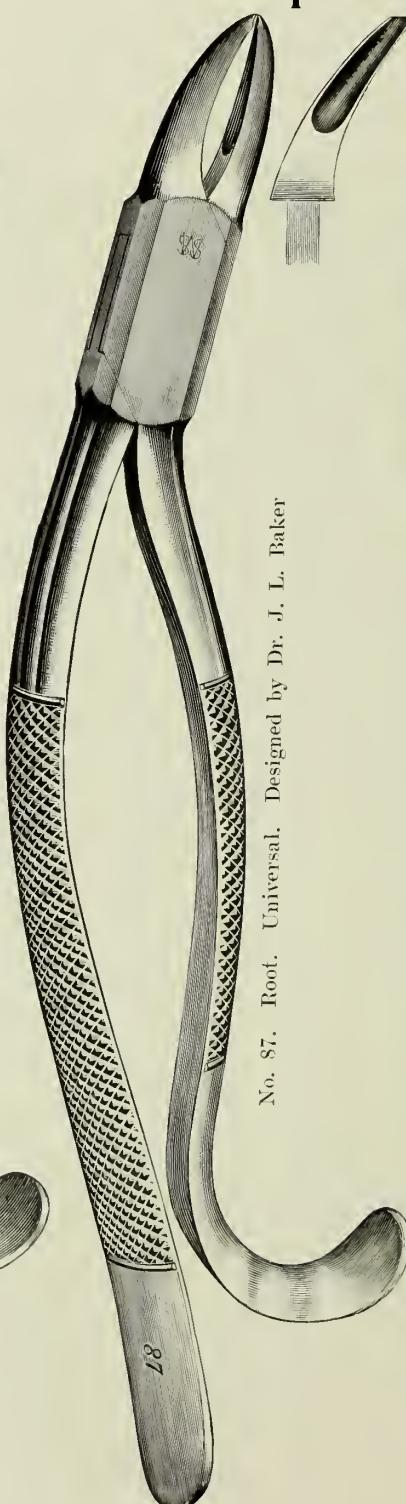
No. 50 L. Root, Lower. Left side

Nos. 50 R, 50 L each \$2.50

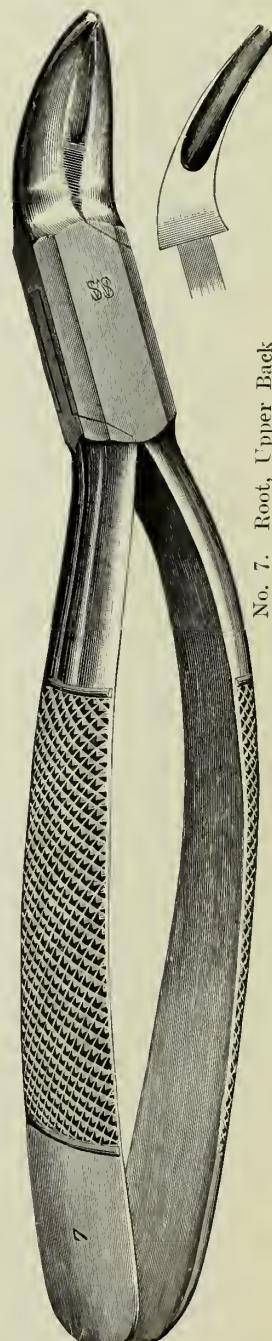
Root Forceps



No. 103. Root, Lower. Half Curved. Resembles No. 50 Right side but has smaller beaks, and greater curve to the handles



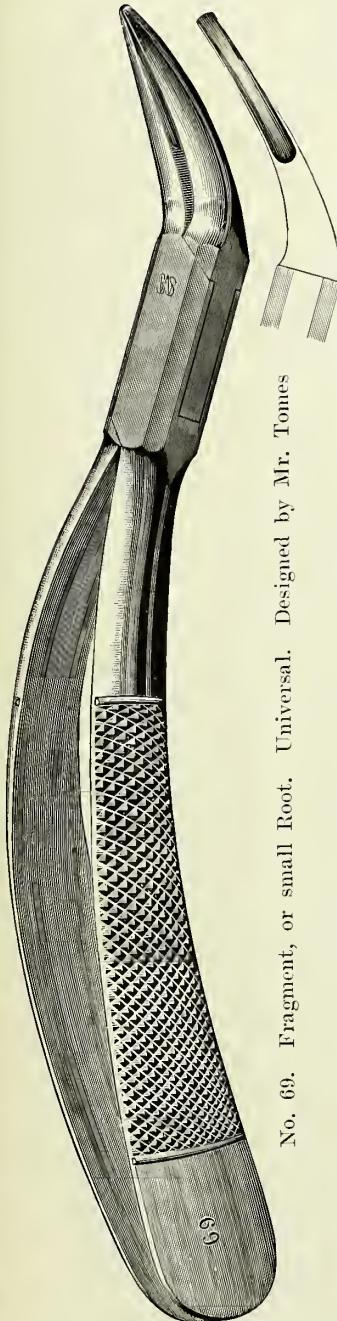
No. 87. Root. Universal. Designed by Dr. J. L. Baker



No. 7. Root, Upper Back

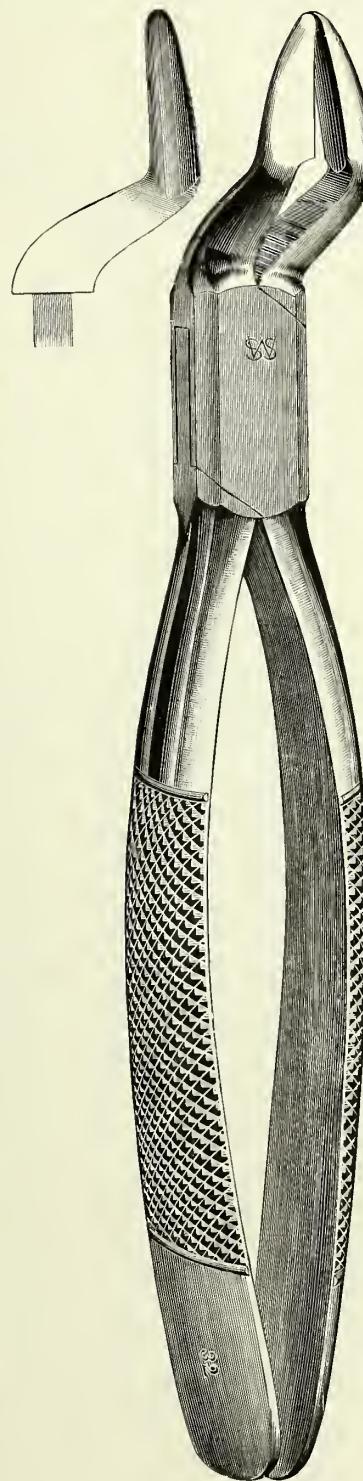
Nos. 103, 87, 7 each \$2.50

Root Forceps

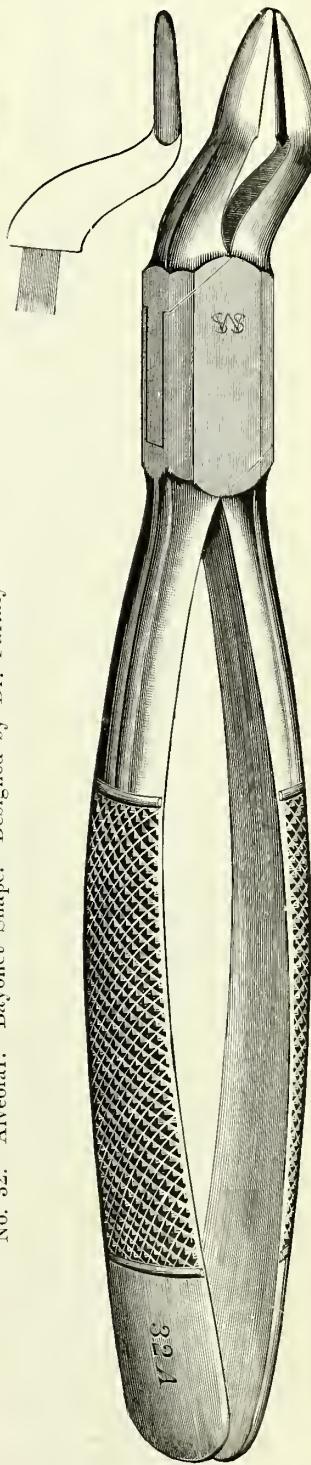


No. 69. Fragment, or small Root. Universal. Designed by Mr. Tomes

Alveolar Forceps



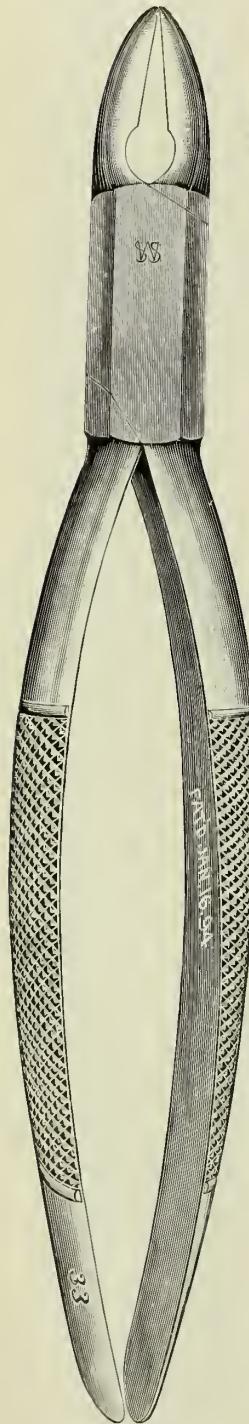
No. 32. Alveolar, Bayonet Shape. Designed by Dr. Parmentier



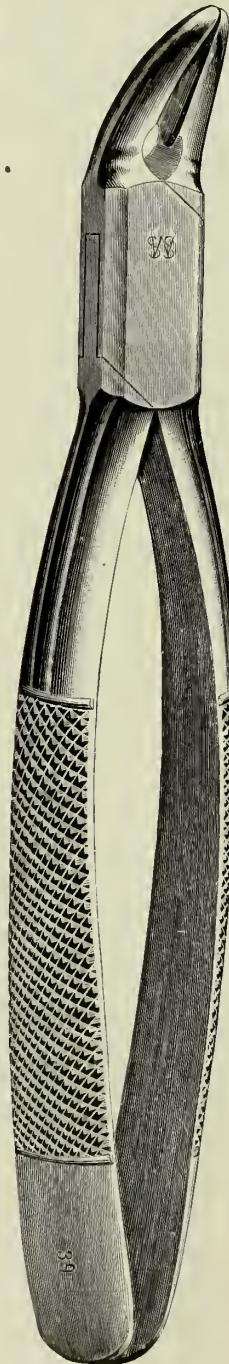
No. 32 A. Alveolar, Bayonet Shape, Small

Nos. 69, 32, 32 A each \$2.50

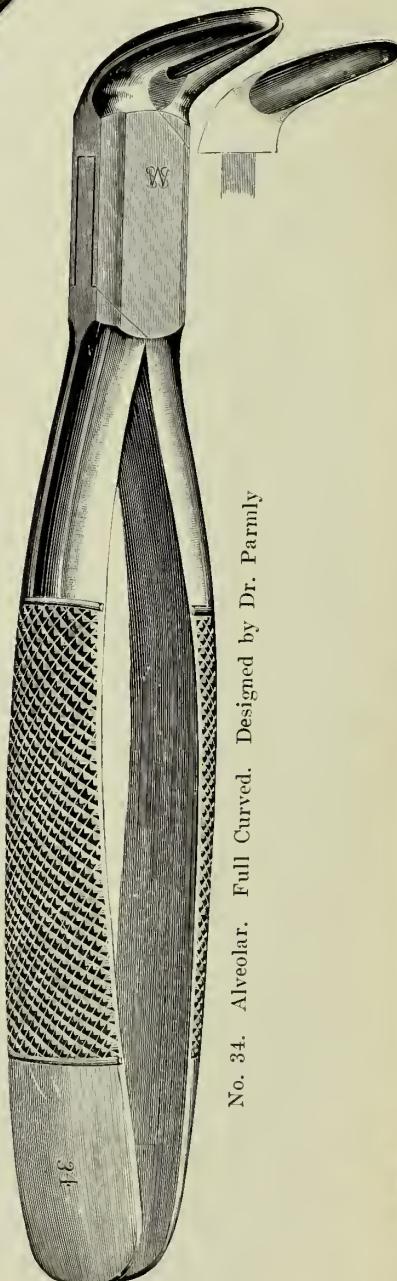
Alveolar Forceps



No. 33. Alveolar. Straight. Designed by Dr. Parmly



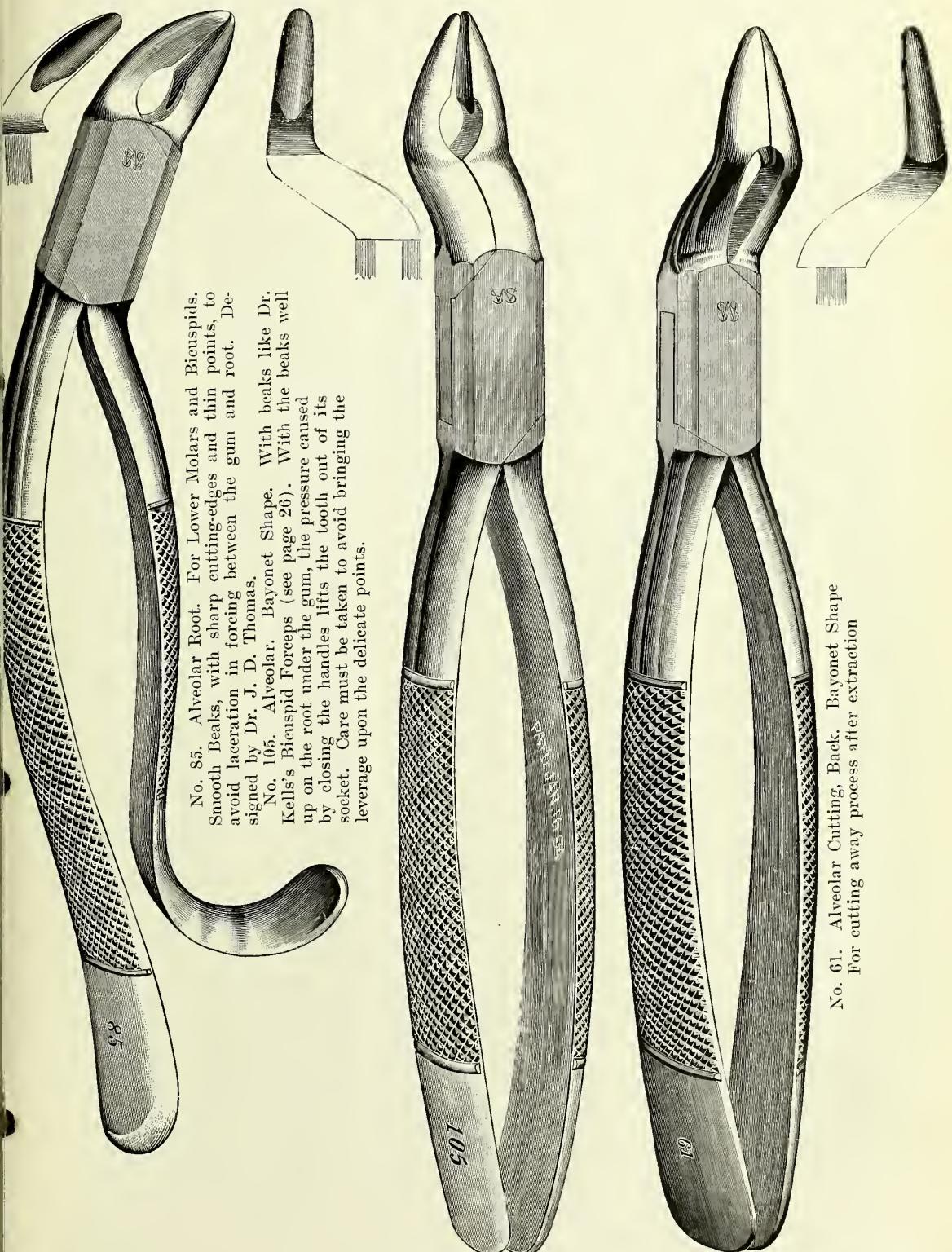
No. 39. Alveolar. Half Curved. Designed by Dr. Parmly



No. 34. Alveolar. Full Curved. Designed by Dr. Parmly

Nos. 33, 39, 34 each \$2.50

Alveolar Forceps



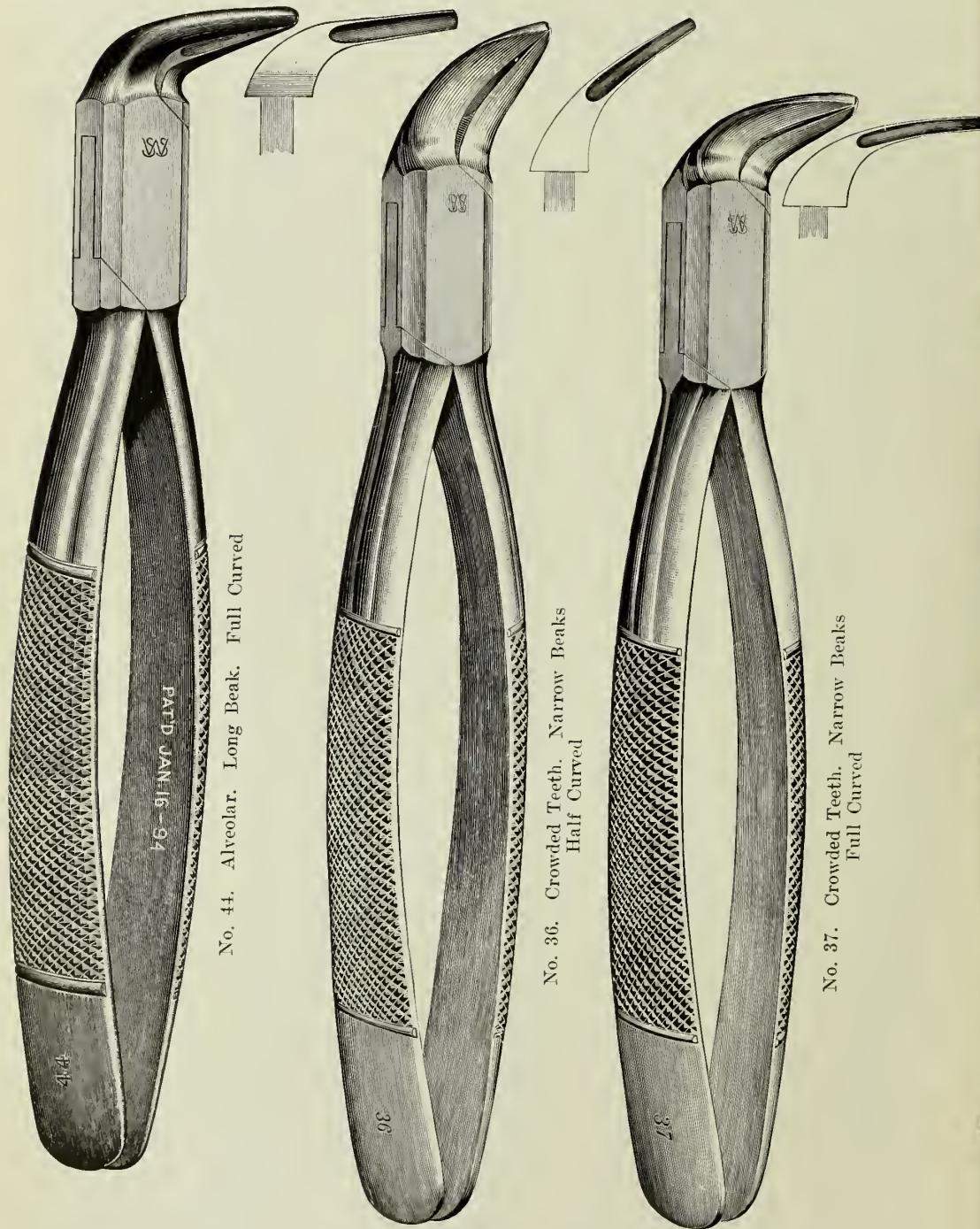
No. 85. Alveolar Root. For Lower Molars and Bicuspid. Smooth Beaks, with sharp cutting-edges and thin points, to avoid laceration in forcing between the gum and root. Designed by Dr. J. D. Thomas.

No. 105. Alveolar. Bayonet Shape. With beaks like Dr. Kell's Bicuspid Forceps (see page 26). With the beaks well up on the root under the gum, the pressure caused by closing the handles lifts the tooth out of its socket. Care must be taken to avoid bringing the leverage upon the delicate points.

No. 61. Alveolar Cutting, Back. Bayonet Shape
For cutting away process after extraction

No. 85 each \$3.00
Nos. 105, 61 " 2.50

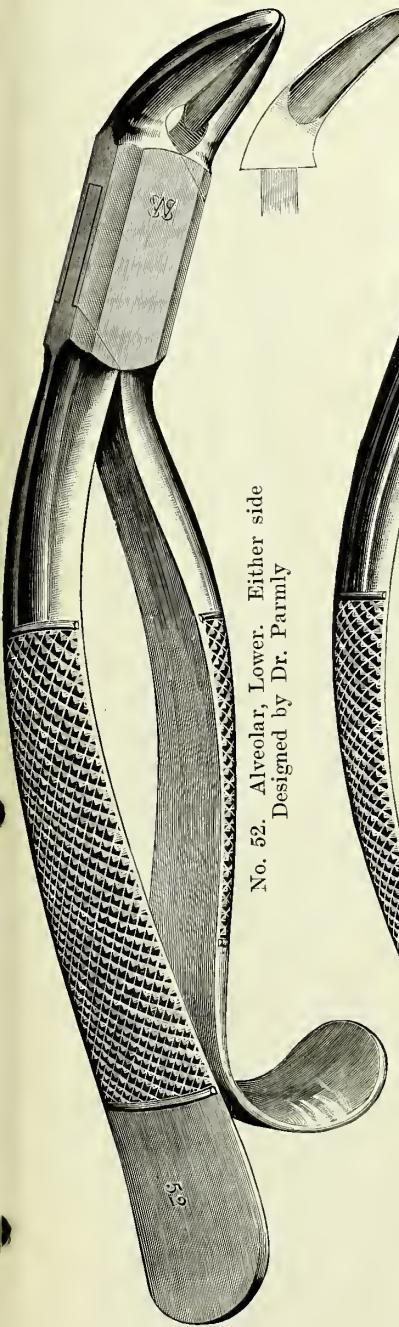
Alveolar Forceps



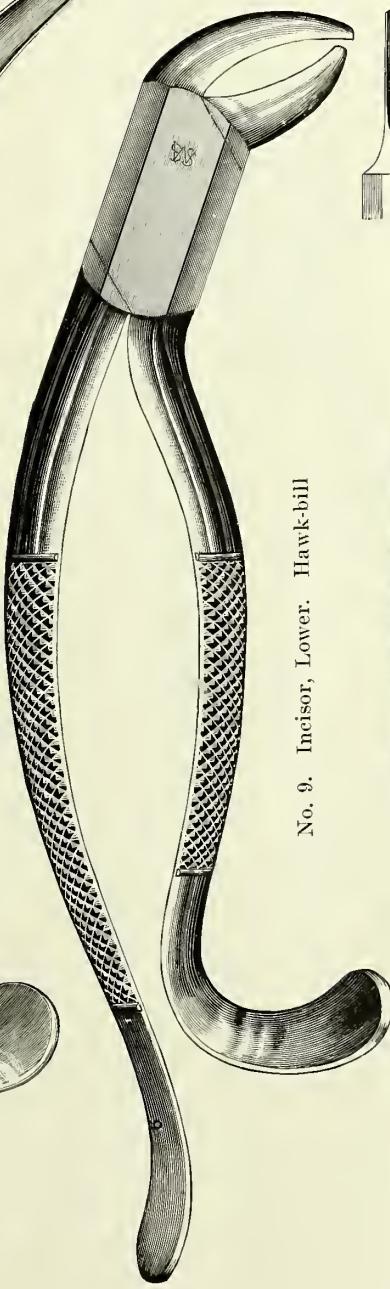
Nos. 44, 36, 37 each \$2.50

Alveolar Forceps

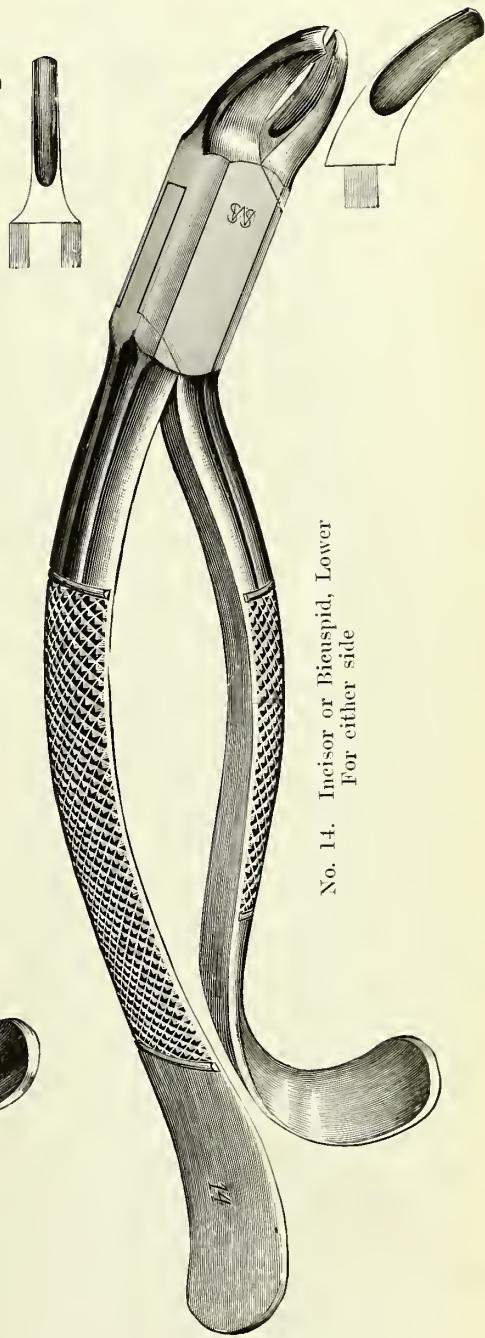
Incisor Forceps



No. 52. Alveolar, Lower. Either side
Designed by Dr. Parmly



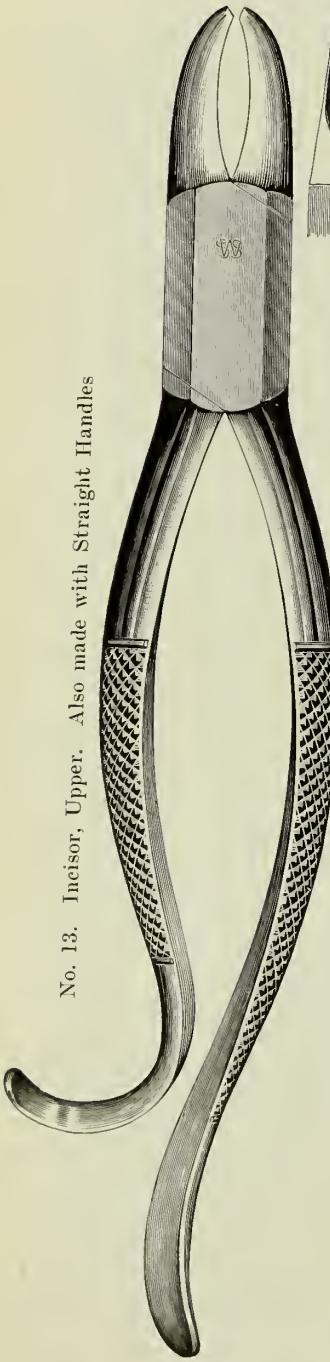
No. 9. Incisor, Lower. Hawk-bill



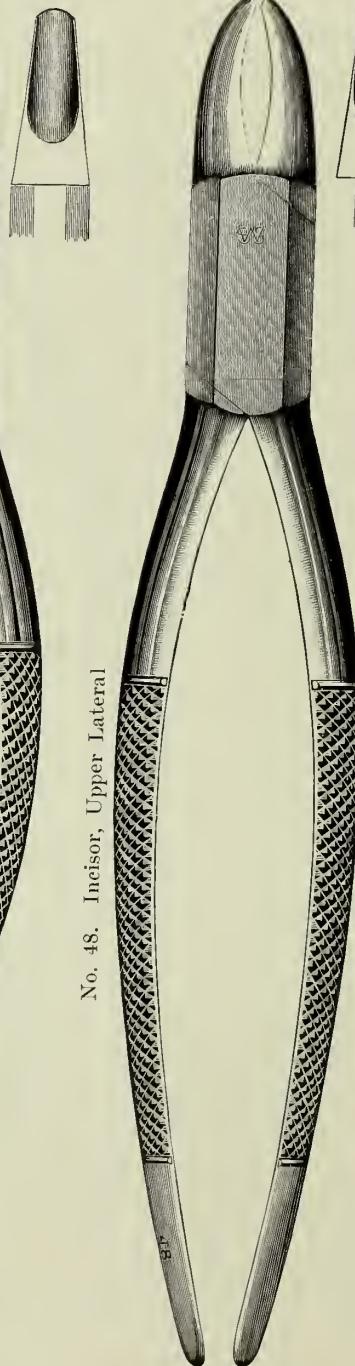
No. 14. Incisor or Bicuspid, Lower
For either side

Nos. 52, 9, 14 each \$2.50

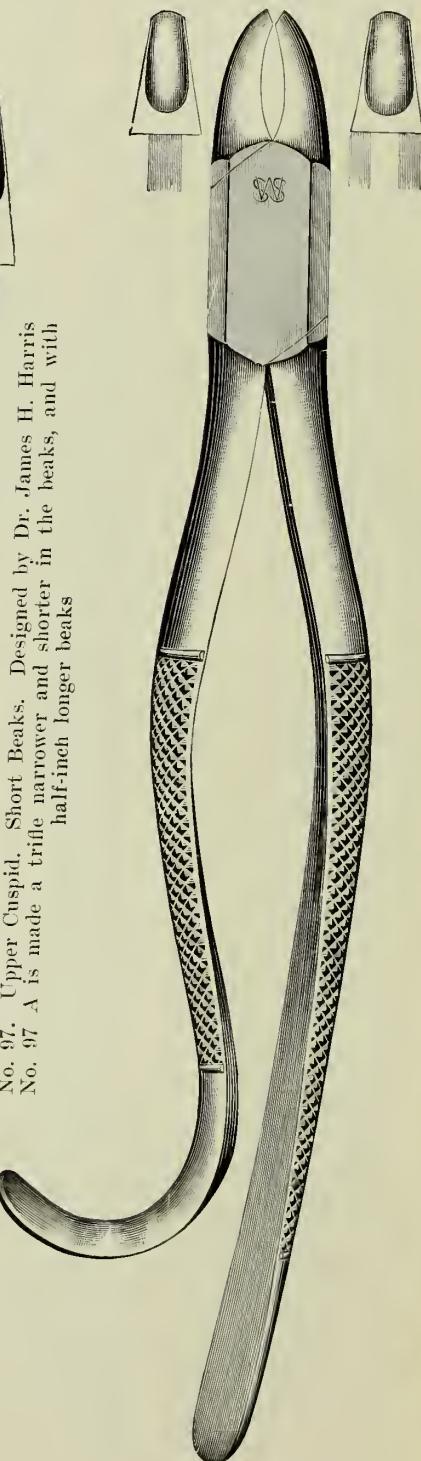
Incisor and Cuspid Forceps



No. 13. Incisor, Upper. Also made with Straight Handles



No. 48. Incisor, Upper Lateral

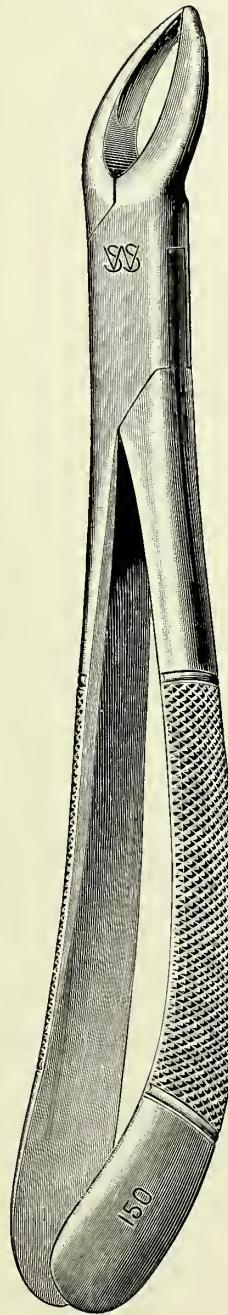


No. 97. Upper Cuspid. Short Beaks. Designed by Dr. James H. Harris
No. 97 A is made a trifle narrower and shorter in the beaks, and with
half-inch longer beaks

Nos. 13 (Hook or Straight), 48, 97, 97 A each \$2.50

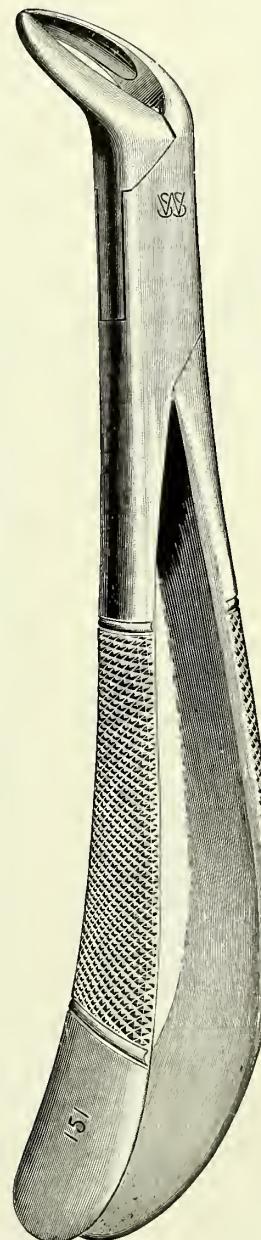
Universal Incisor and Root Forceps

Devised by DR. M. H. CRYER



No. 150. Universal Incisor, Cuspid, Bicuspid, and Root, Upper

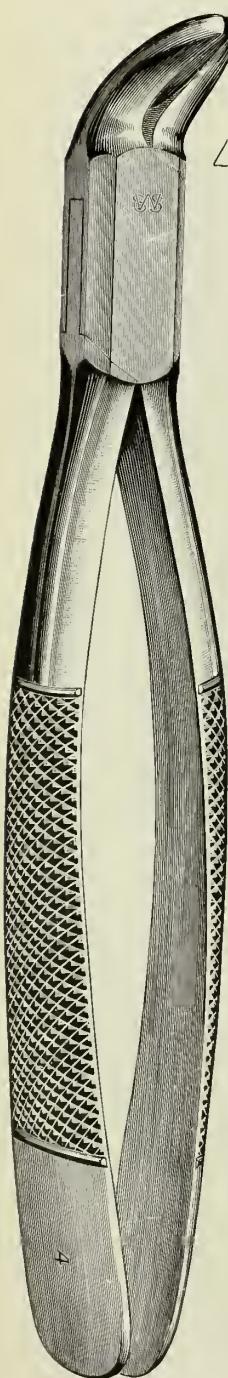
Nos. 150 and 151 are general purpose Forceps, more especially for the extraction of any single-rooted teeth. Dr. Cryer claims that these two pairs are sufficient to extract any tooth in the mouth which ought to be extracted. Other dentists have informed us that with No. 150, for instance, they have gone all around the upper jaw and extracted every tooth readily. These Forceps are particularly adapted for the extraction of third molars, their small size and adaptability permitting them to be passed back outside of the jaws within the cheeks and then to be turned so as to grasp and extract where a larger Forceps would fail. The No. 150 has a wide range of uses. It is well suited for many extractions in the lower jaw, and is exceedingly useful in taking out impacted teeth. It is well in using No. 151 on frail lower incisors to exercise some care to prevent the full gripping power of the beaks from being exerted; otherwise, the power is sufficient in careless hands to snap the tooth.



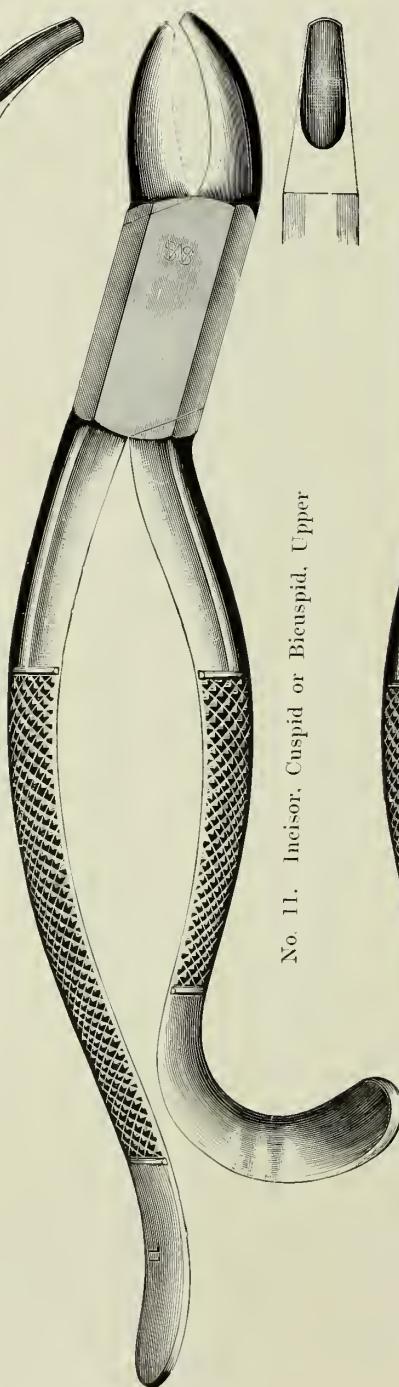
No. 151. Universal Incisor, Cuspid, Bicuspid, and Root, Lower

Nos. 150, 151 each \$2.50

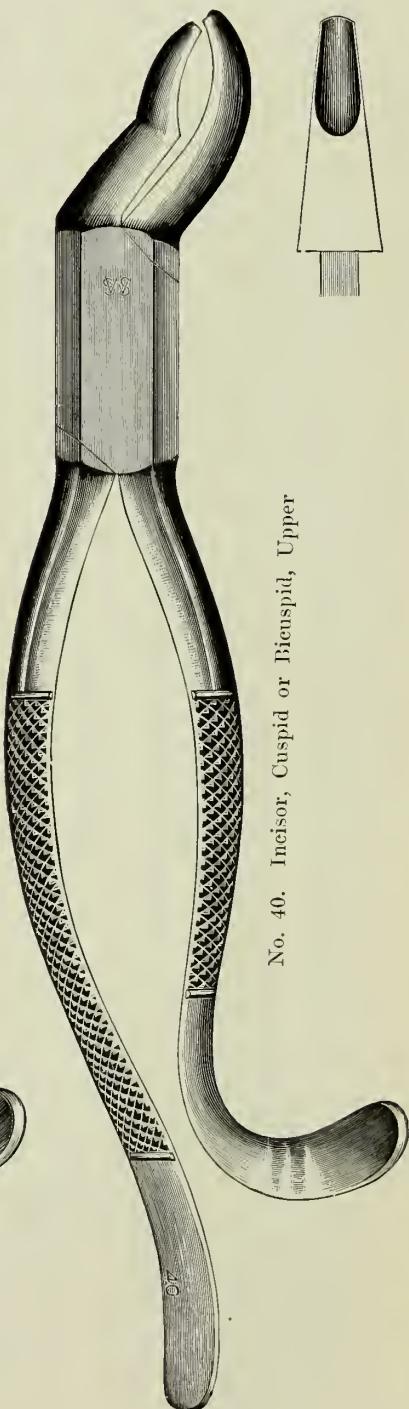
Bicuspid Forceps



No. 4. Bicuspid, Upper or Lower. Half Curved



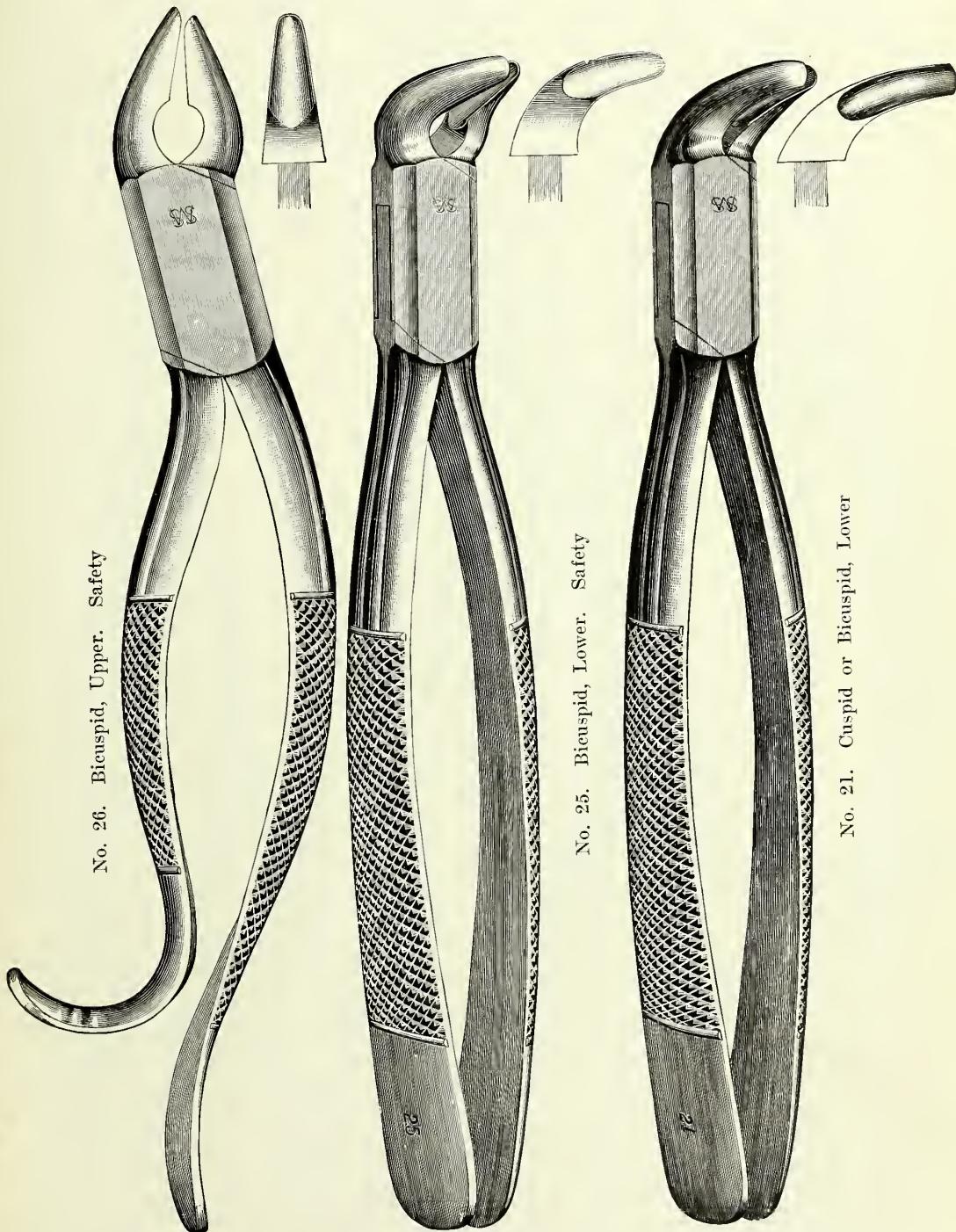
No. 11. Incisor, Cuspid or Bicuspid, Upper



No. 40. Incisor, Cuspid or Bicuspid, Upper

Nos. 4, 11, 40 each \$2.50

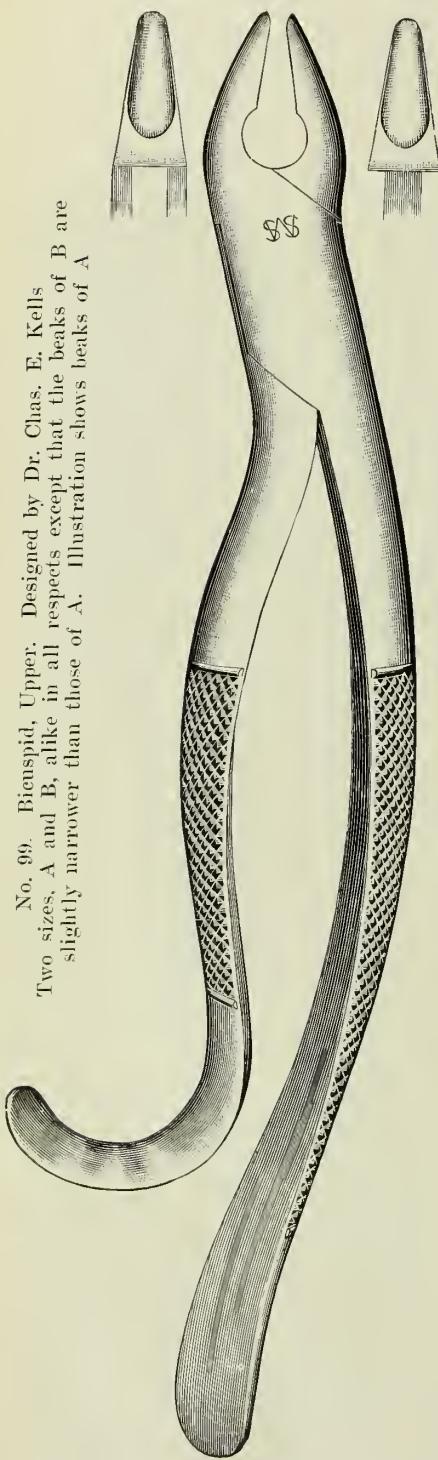
Bicuspid Forceps



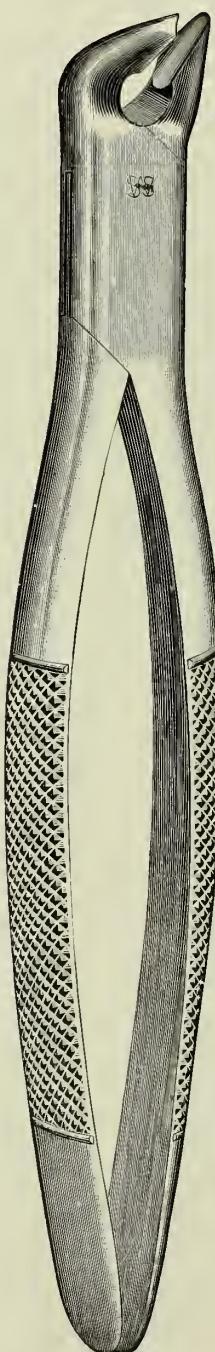
Nos. 26, 25, 21 each \$2.50

Bicuspid Forceps

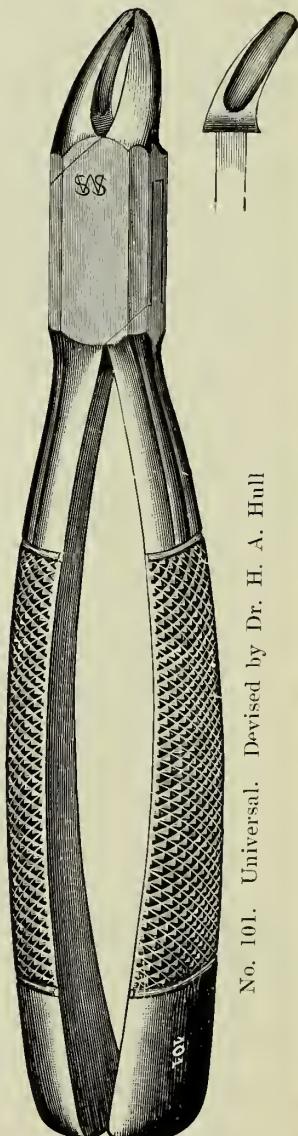
No. 99. Bicuspid, Upper. Designed by Dr. Chas. E. Kells
 Two sizes, A and B, alike in all respects except that the beaks of B are
 slightly narrower than those of A. Illustration shows beaks of A



No. 100. Bicuspid, Lower
 Designed by Dr. Chas. E. Kells



No. 101. Universal. Devised by Dr. H. A. Hull

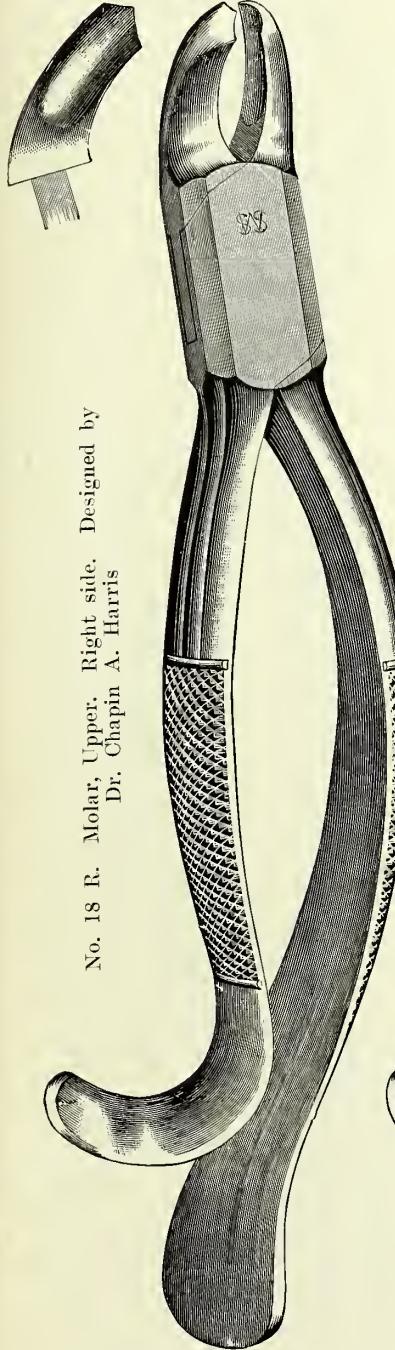


The beaks of Forceps Nos. 99 and 100 are very smooth all over, without cutting-edges, but with thin points, the inner surfaces of which are beveled outward slightly. In use the beaks are forced beneath the gums well up onto the root, when the pressure caused by closing the handles helps to lift the tooth out of its socket. Care must be taken to avoid bringing too great leverage upon the delicate points, as otherwise they may chip.

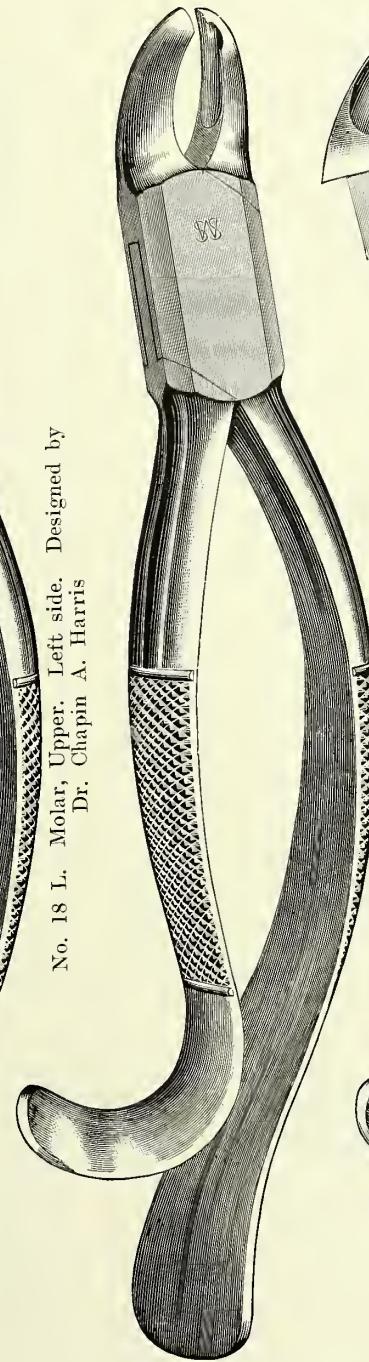
Nos. 99 A, 99 B, 100, 101 each \$2.50

Upper Molar Forceps

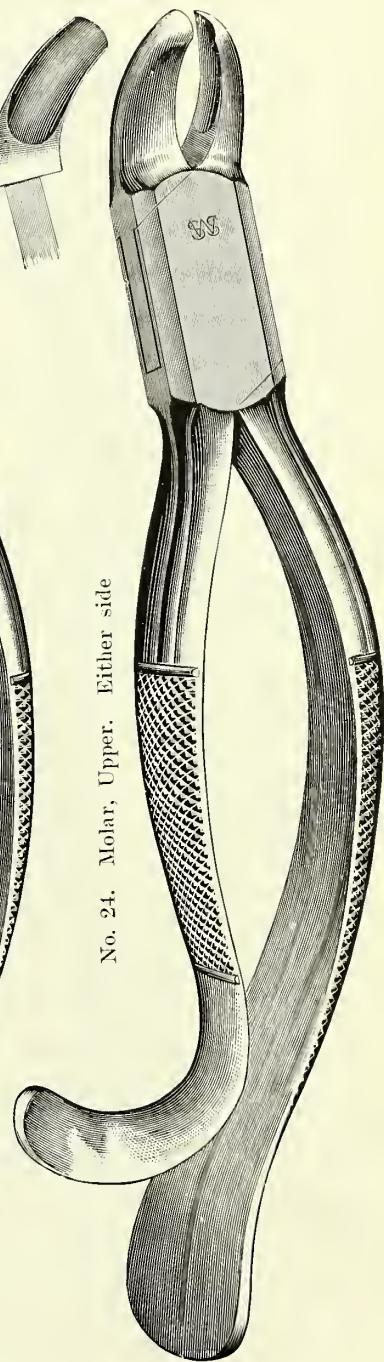
No. 18 R. Molar, Upper. Right side. Designed by
Dr. Chapin A. Harris



No. 18 L. Molar, Upper. Left side. Designed by
Dr. Chapin A. Harris

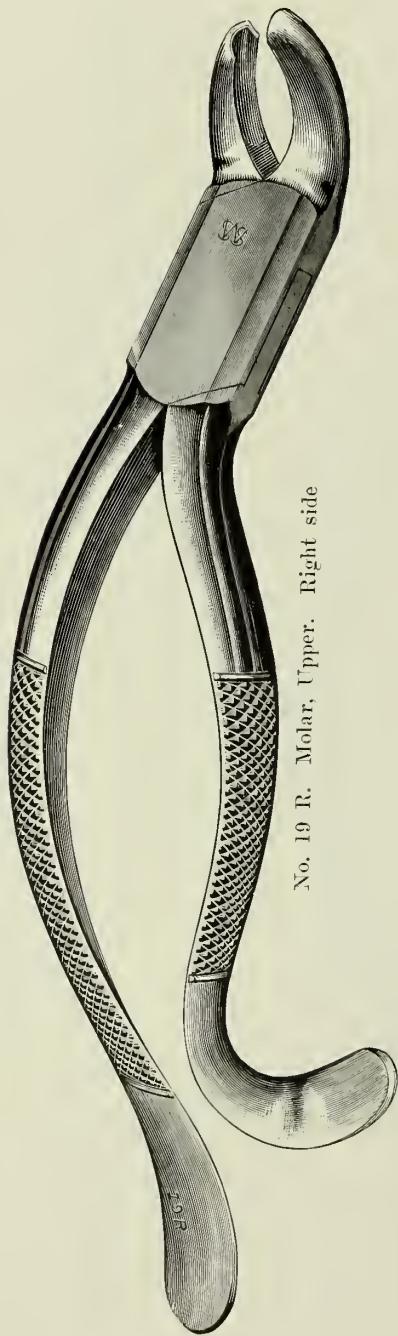


No. 24. Molar, Upper. Either side

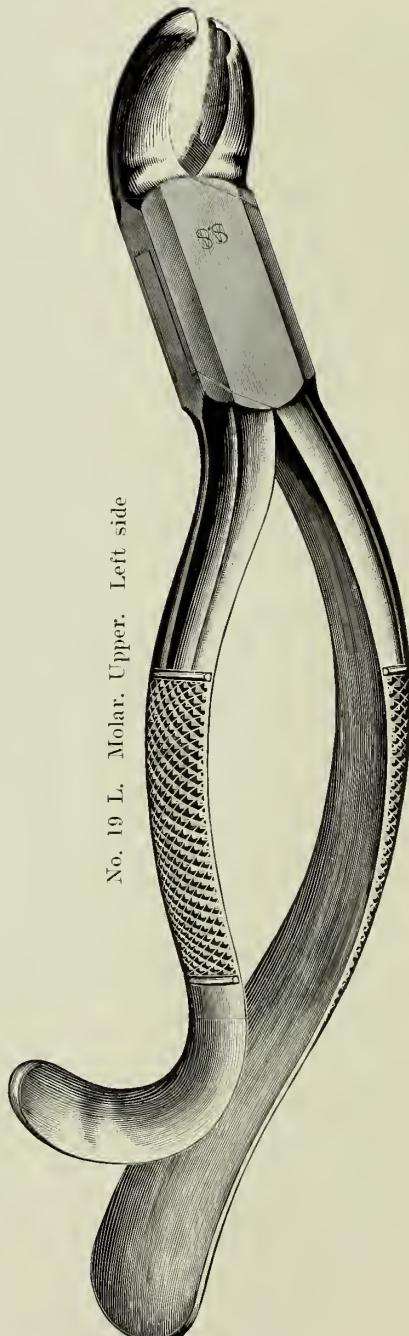


Nos. 18 R, 18 L, 24 each \$2.50

Upper Molar Forceps



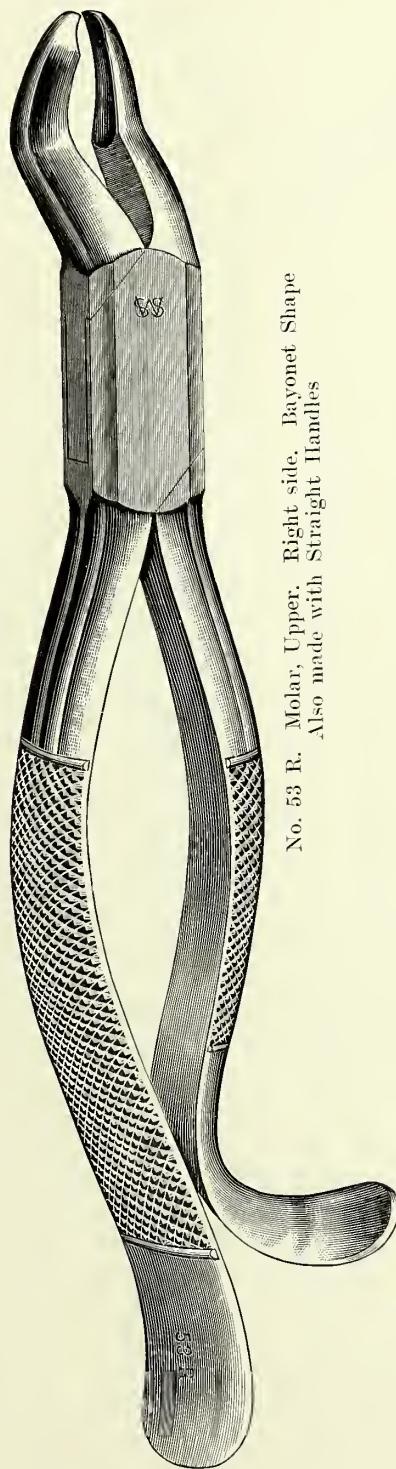
No. 19 R. Molar, Upper. Right side



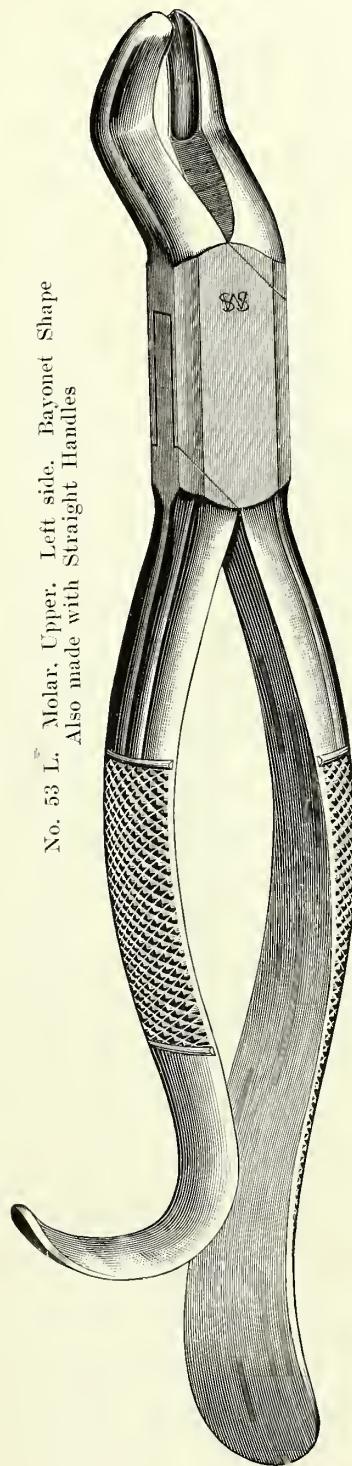
No. 19 L. Molar, Upper. Left side

Nos. 19 R, 19 L each \$2.50

Upper Molar Forceps



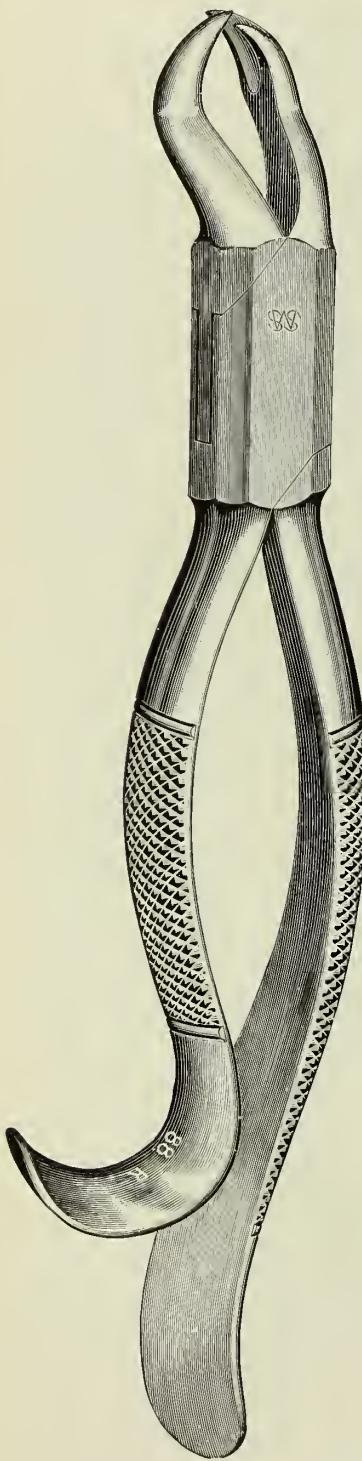
No. 53 R. Molar, Upper. Right side. Bayonet Shape
Also made with Straight Handles



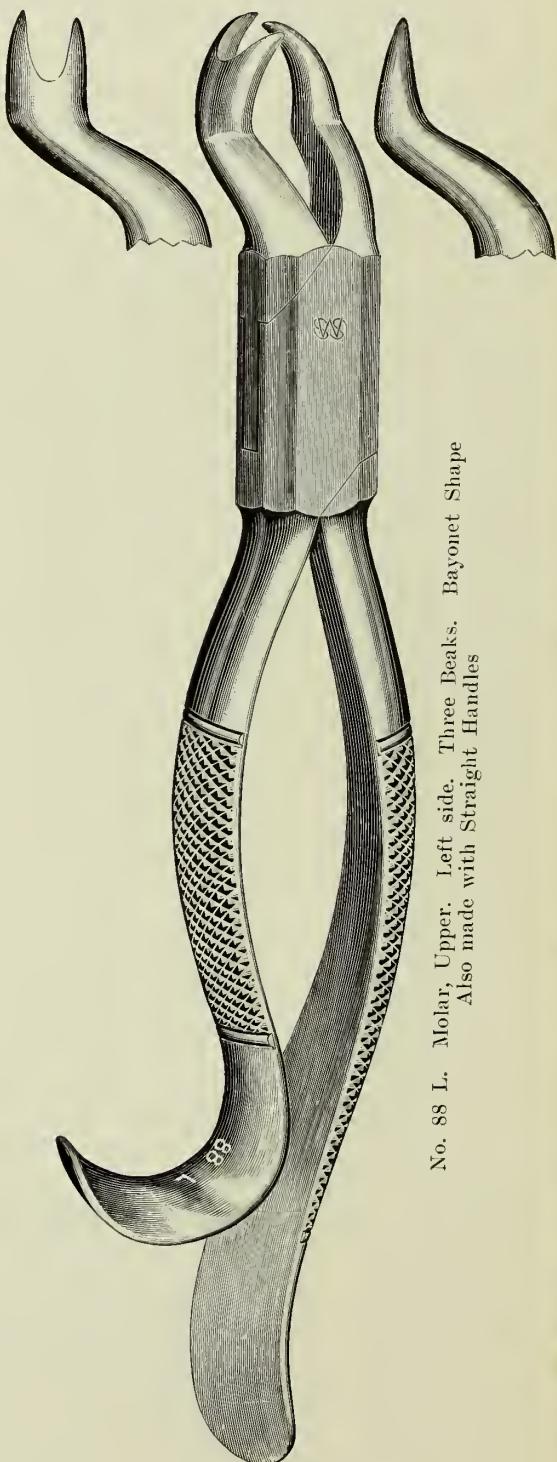
No. 53 L. Molar, Upper. Left side. Bayonet Shape
Also made with Straight Handles

Nos. 53 R (Hook or Straight), 53 L (Hook or Straight) each \$2.50

Upper Molar Forceps



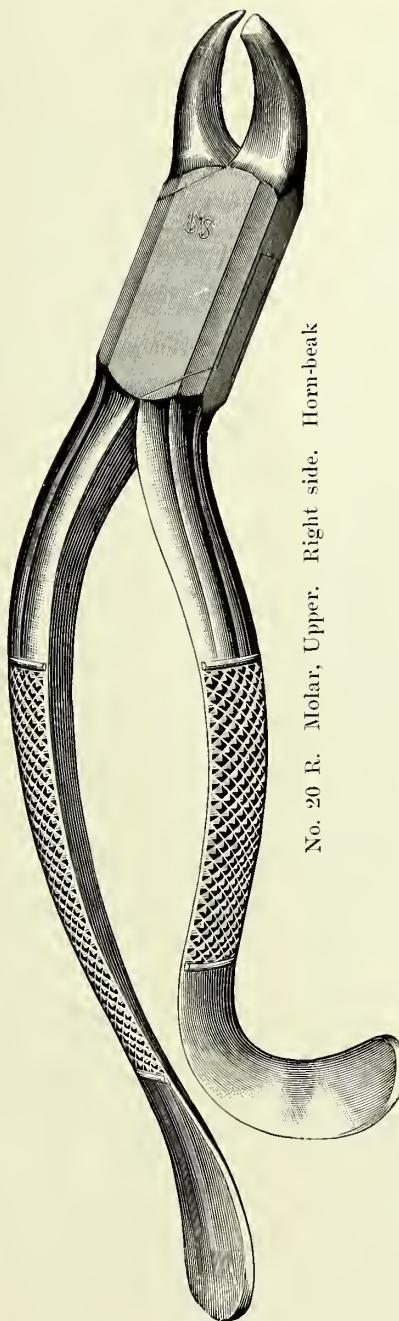
No. 88 R. Molar, Upper. Right side. Three Beaks. Bayonet Shape
Also made with Straight Handles



No. 88 L. Molar, Upper. Left side. Three Beaks. Bayonet Shape
Also made with Straight Handles

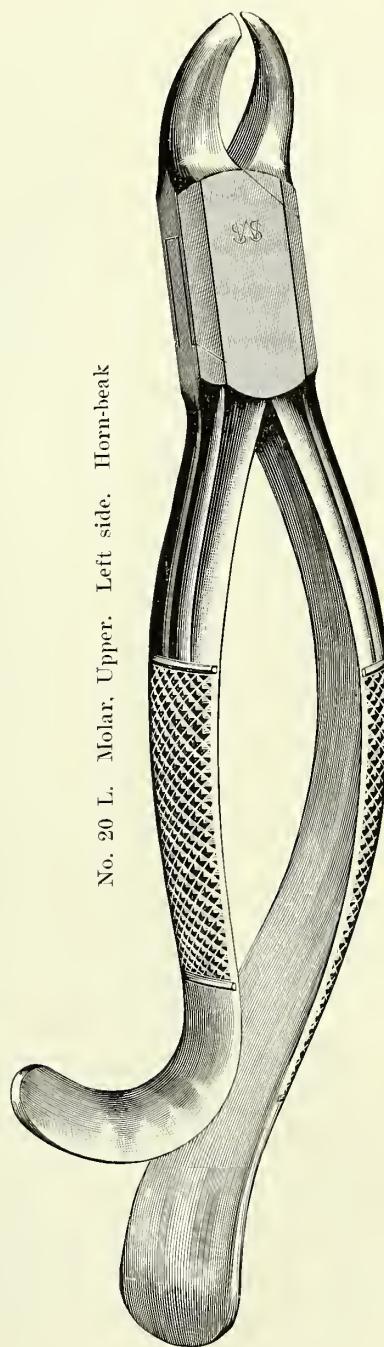
Nos. 88 R (Straight or Hook), 88 L (Straight or Hook) each \$3.25

Upper Molar Forceps



No. 20 R. Molar, Upper. Right side. Horn-beak

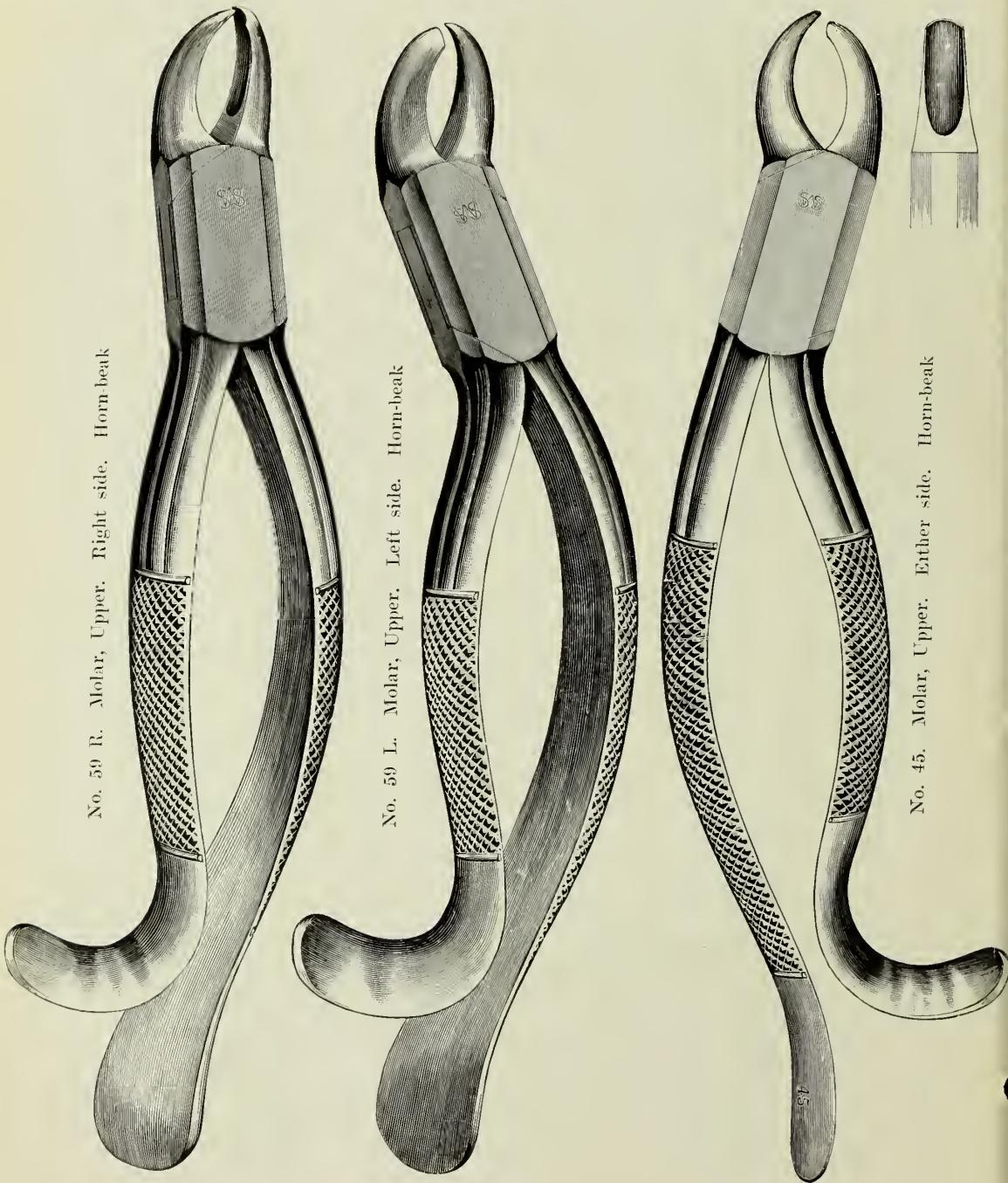
These Forceps (Nos. 20 R and L), with No. 16, make an invaluable set for the extraction of Molar roots when the crowns are decayed below the gum margin.



No. 20 L. Molar, Upper. Left side. Horn-beak

Nos. 20 R, 20 L each \$2.50

Upper Molar Forceps



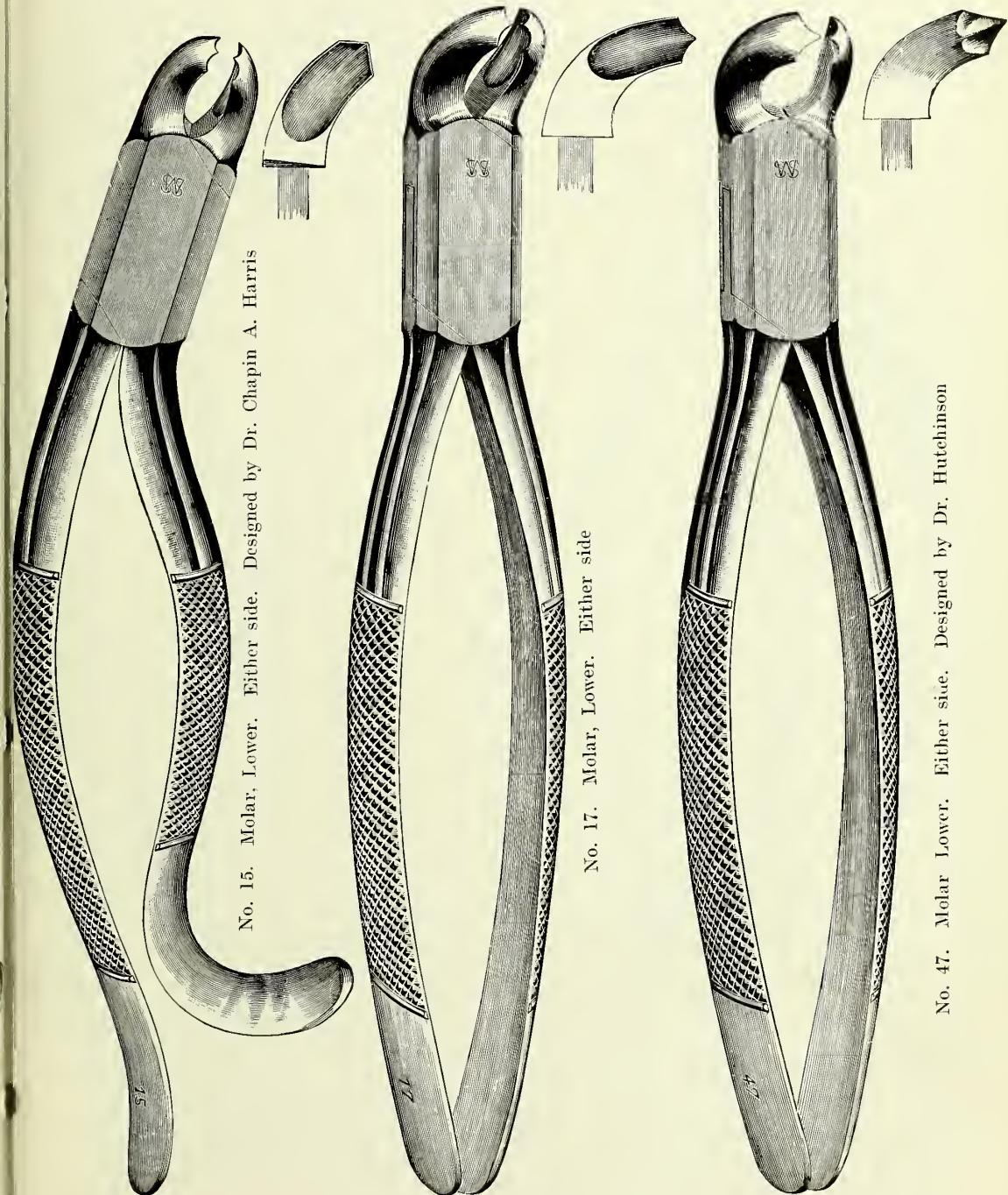
No. 59 R. Molar, Upper. Right side. Horn-beak

No. 59 L. Molar, Upper. Left side. Horn-beak

No. 45. Molar, Upper. Either side. Horn-beak

Nos. 59 R, 59 L, 45 each \$2.50

Lower Molar Forceps



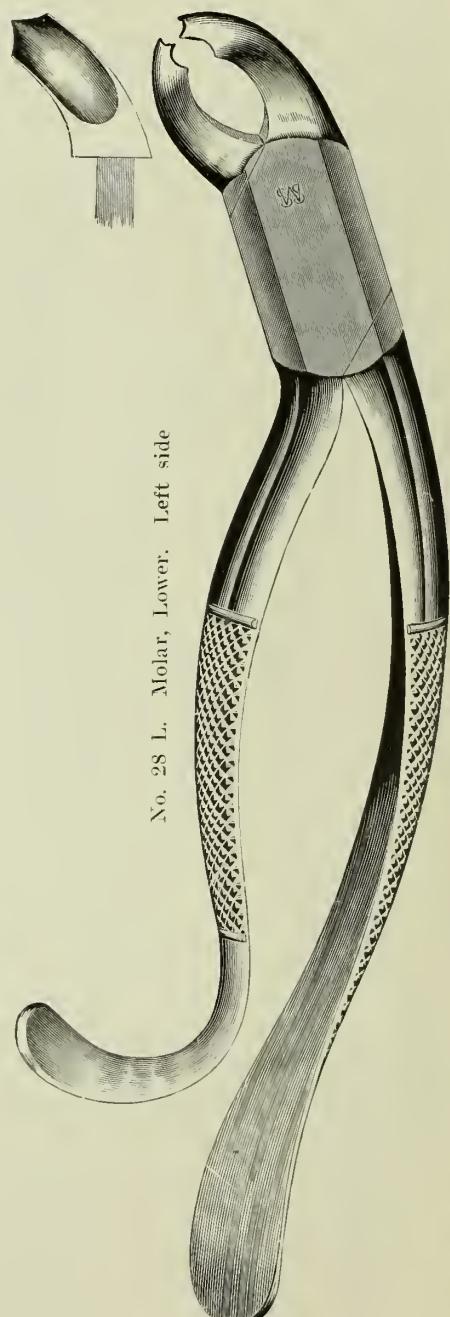
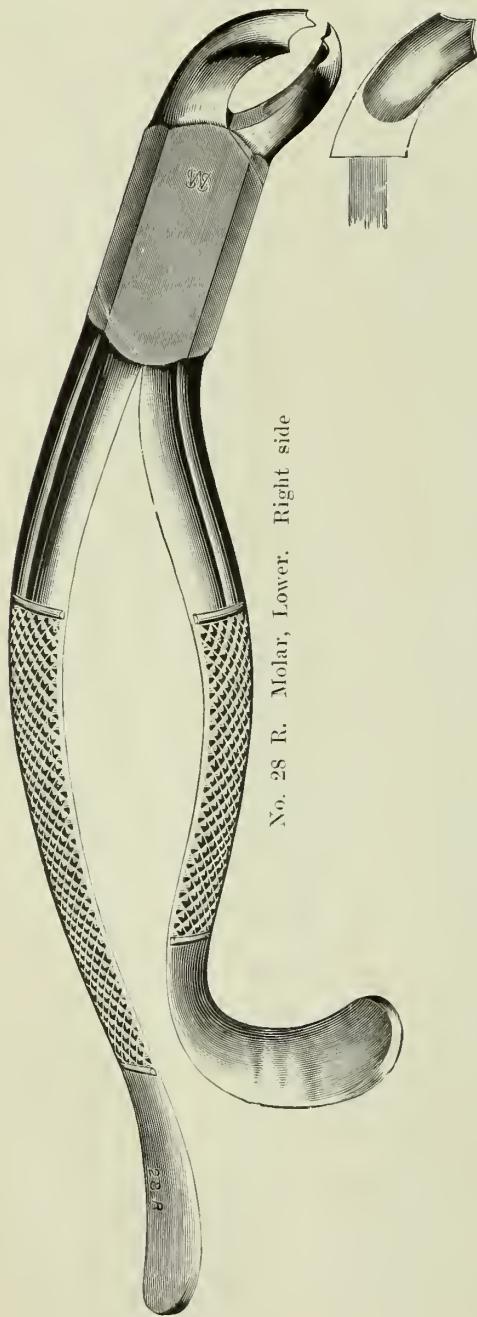
No. 15. Molar, Lower. Either side. Designed by Dr. Chapin A. Harris

No. 17. Molar, Lower. Either side

No. 47. Molar Lower. Either side. Designed by Dr. Hutchinson

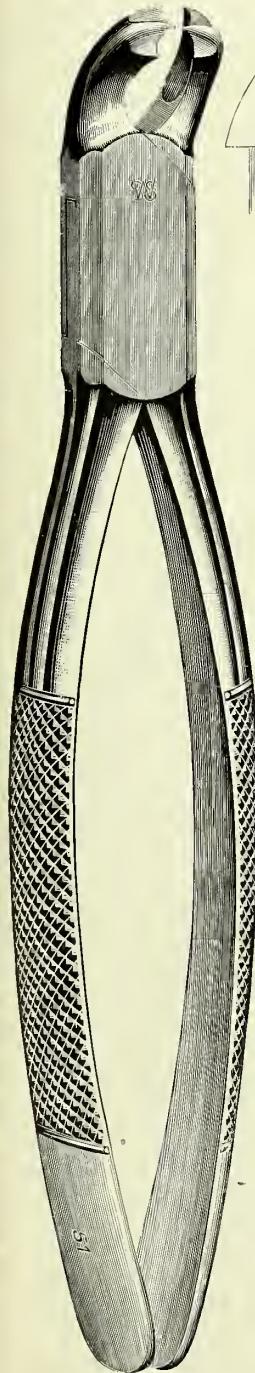
Nos. 15, 17, 47 each \$2.50

Lower Molar Forceps

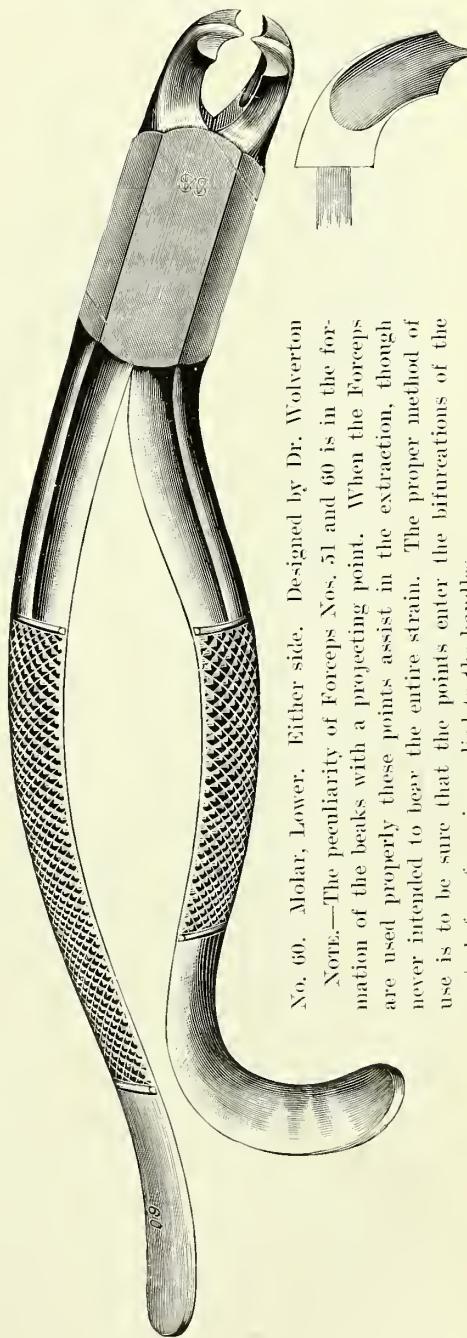


Nos. 28 R, 28 L each \$2.50

Lower Molar Forceps



No. 51. Molar, Lower. Either side. Designed by Dr. Wolverton

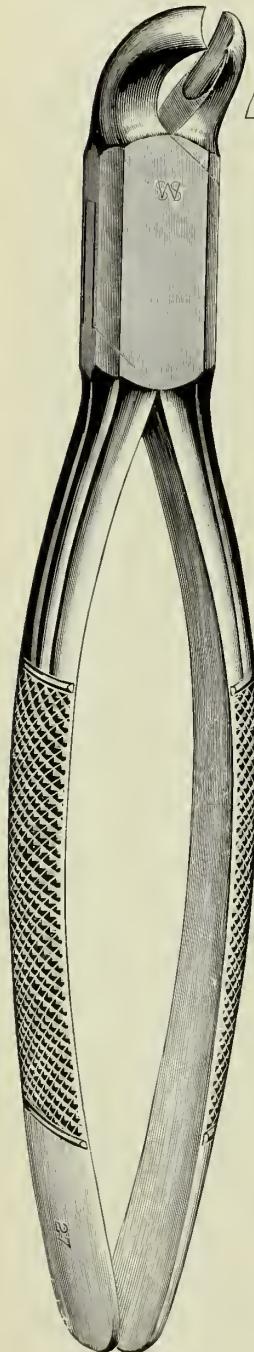


No. 60. Molar, Lower. Either side. Designed by Dr. Wolverton

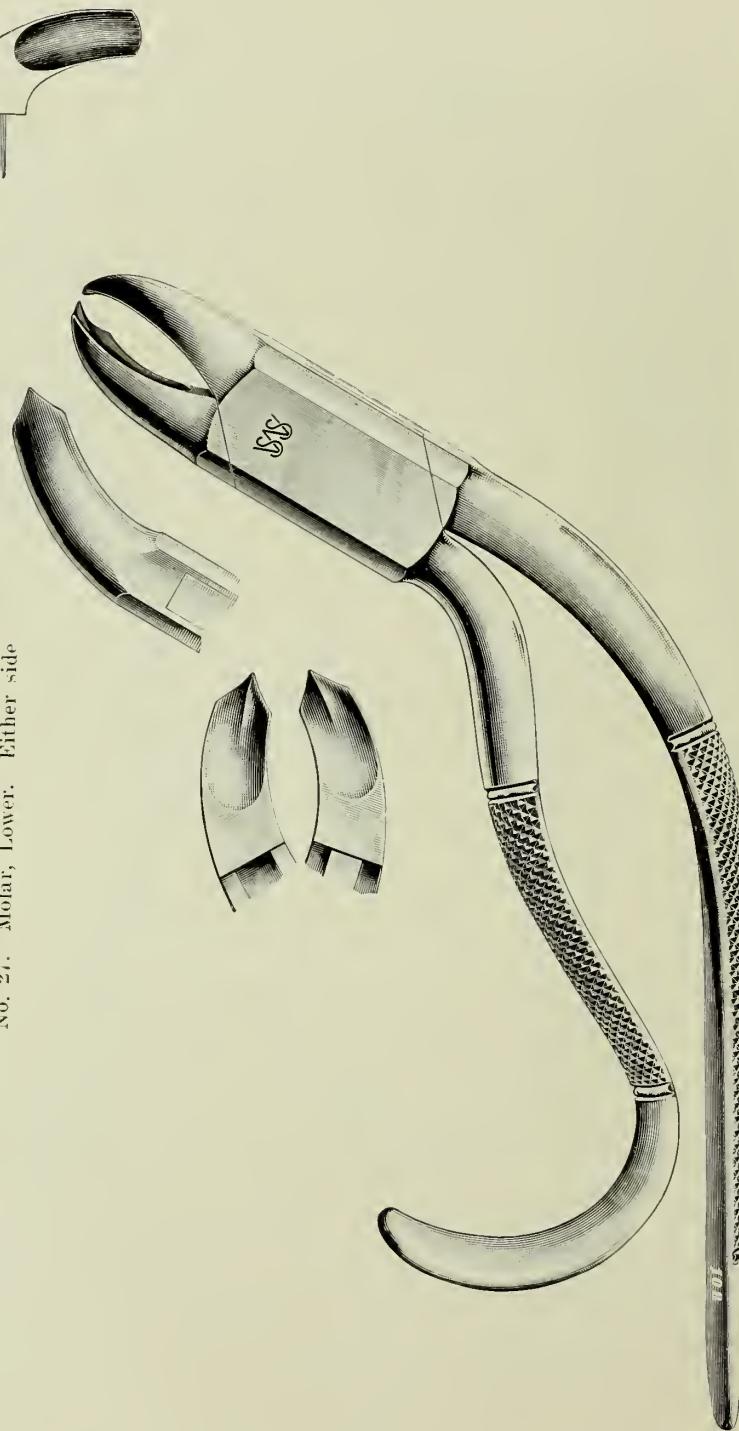
Note.—The peculiarity of Forceps Nos. 51 and 60 is in the formation of the beaks with a projecting point. When the Forceps are used properly these points assist in the extraction, though never intended to bear the entire strain. The proper method of use is to be sure that the points enter the bifurcations of the roots before force is applied to the handles.

Nos. 51, 60 each \$2.50

Lower Molar Forceps



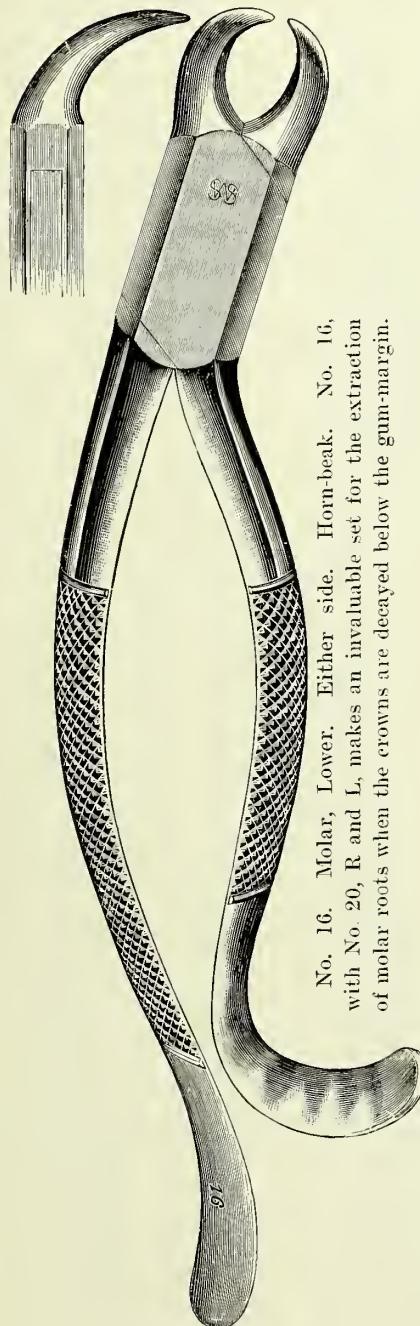
No. 27. Molar, Lower. Either side



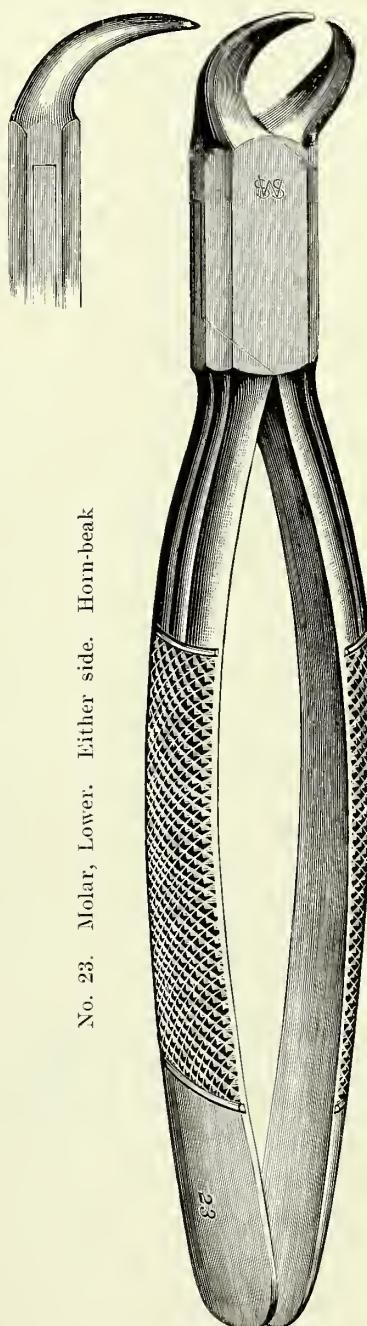
No. 108. Molar, Lower. Either side. Known as T. A. Long's Forceps

Nos. 27, 108 each \$2.50

Lower Molar Forceps



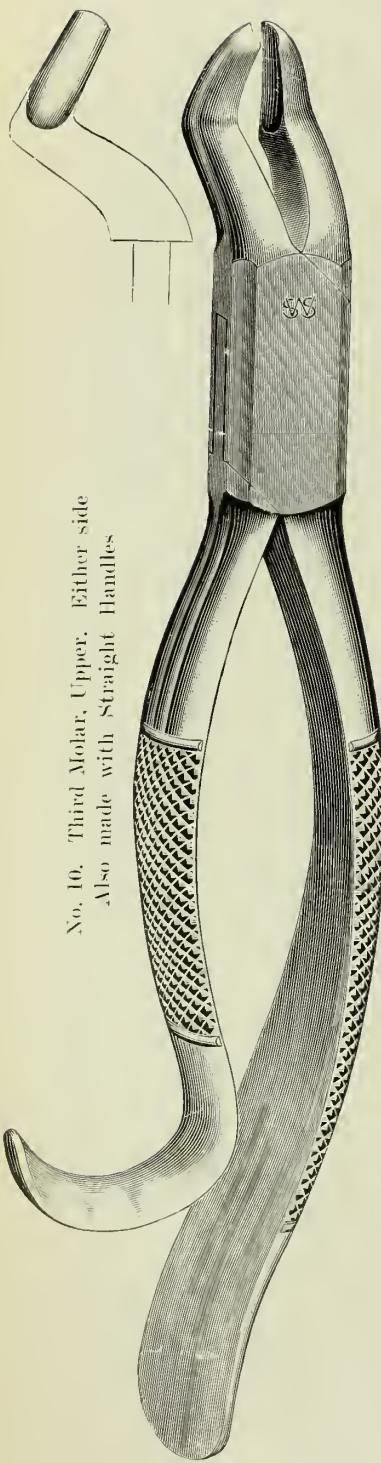
No. 16. Molar, Lower. Either side. Horn-beak. No. 16, with No. 20, R and L, makes an invaluable set for the extraction of molar roots when the crowns are decayed below the gum-margin.



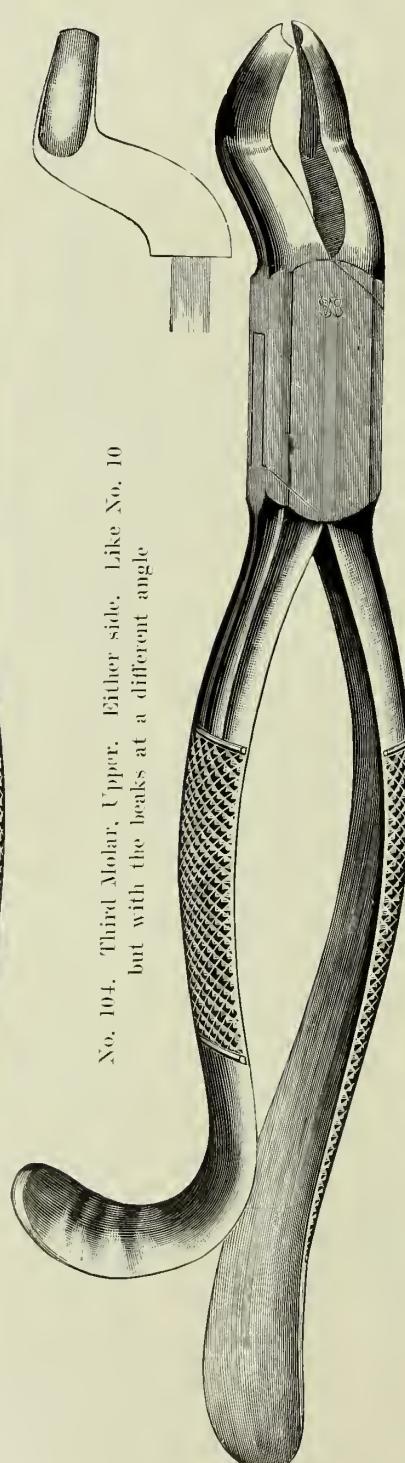
No. 23. Molar, Lower. Either side. Horn-beak

Nos. 16, 23 each \$2.50

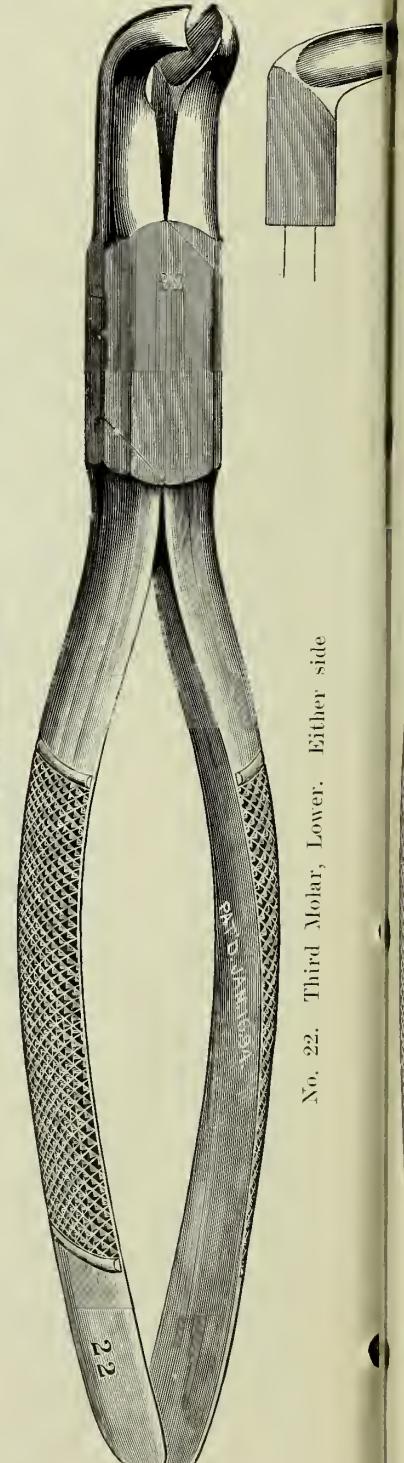
Third Molar Forceps



No. 10. Third Molar, Upper, Either side
Also made with Straight Handles



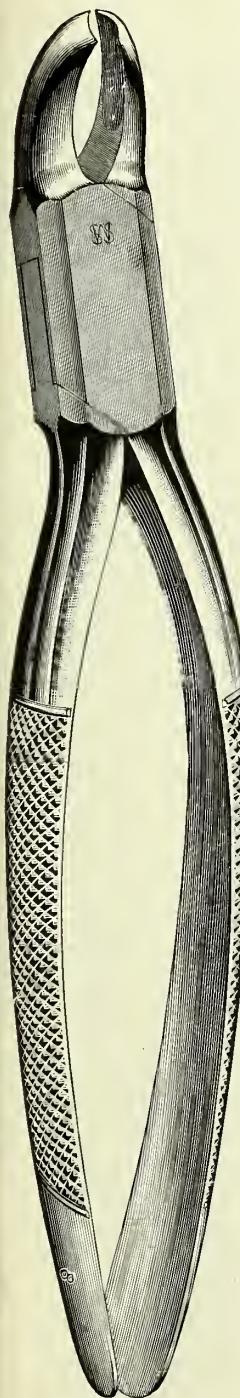
No. 104. Third Molar, Upper, Either side, Like No. 10
but with the beaks at a different angle



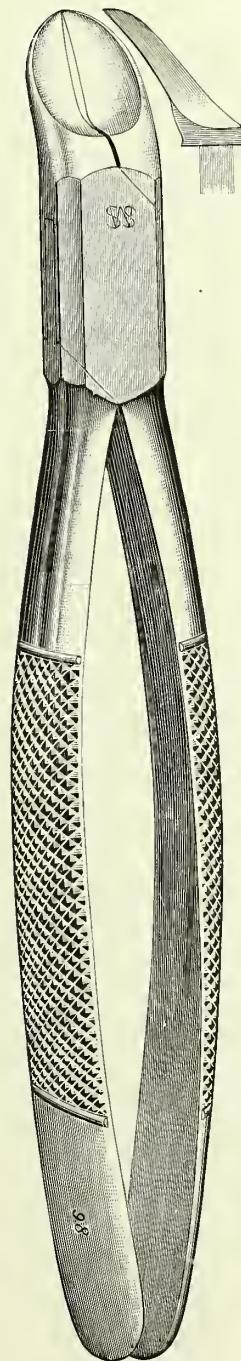
No. 22. Third Molar, Lower, Either side

Nos. 10 (Hook or Straight), 104, 22 each \$2.50

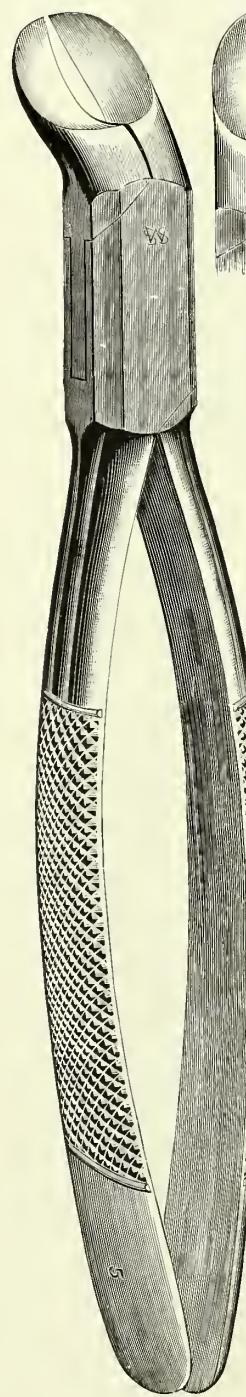
Third Molar Forceps



No. 8. Third Molar, Lower. Either side



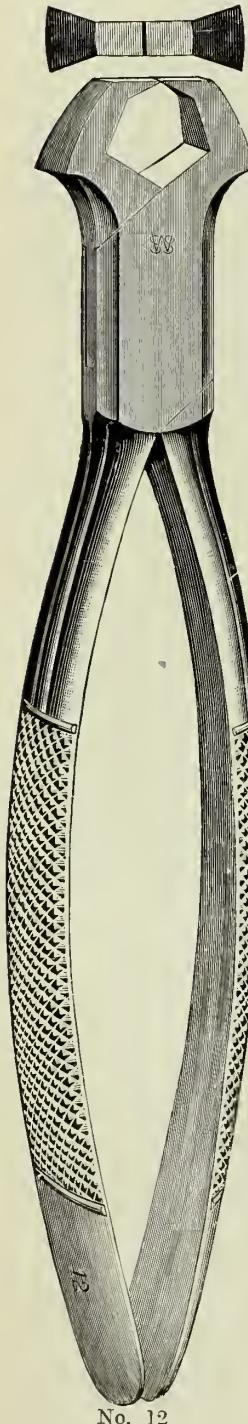
No. 98. Third Molar, Lower. Either side



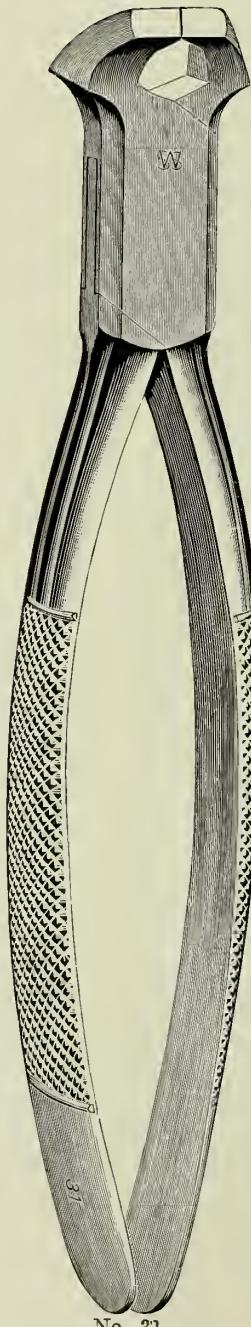
No. 5. Third Molar, Lower. Either side (Physick's)

Nos. 8, 98, 5 each \$2.50

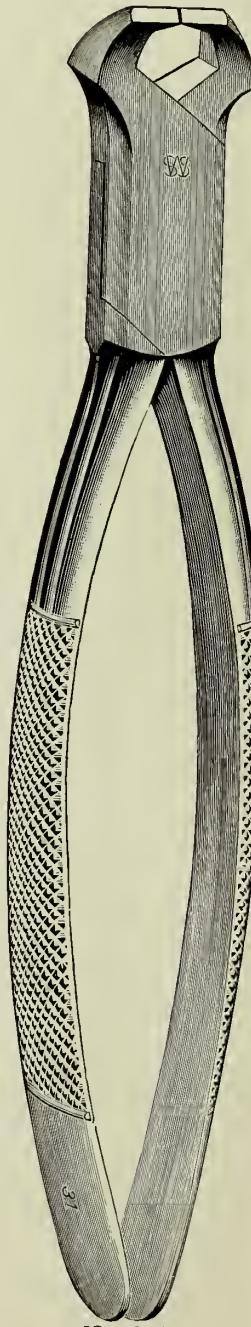
Excising Forceps



No. 12. Excising, Upper. Straight Beaks



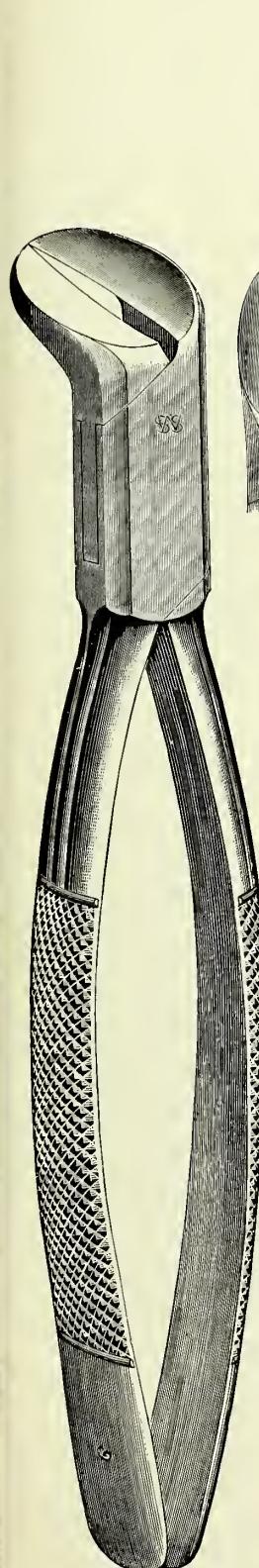
No. 31. Excising, Lower. Curved Beaks



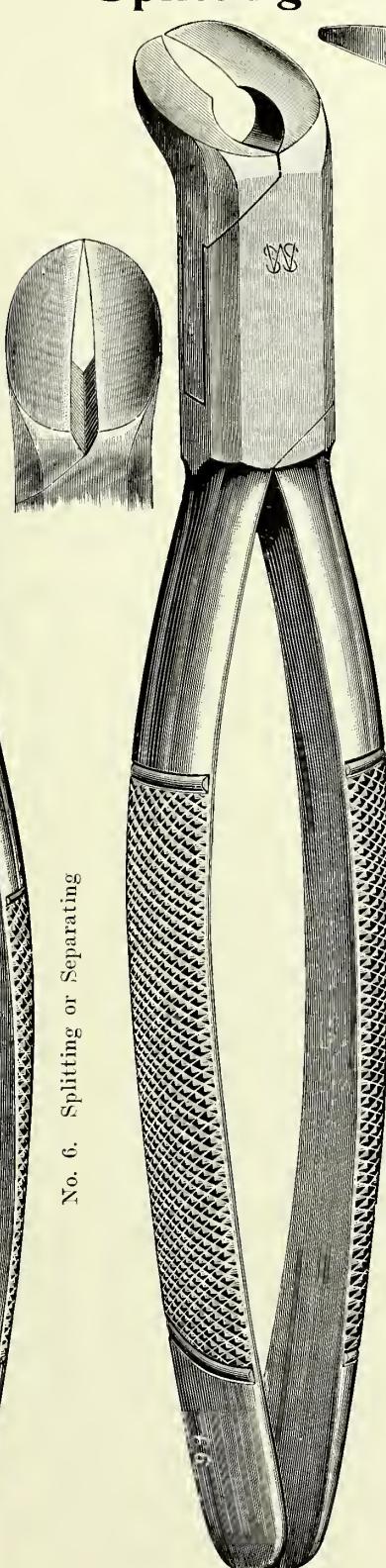
Nos. 12, 31, 31A each \$2.50

No. 31A. Excising, Lower. Curved Beaks. Like No. 31, but with narrow beaks for preparing the root and cutting off posts in mounting crowns. Suggested by Dr. How

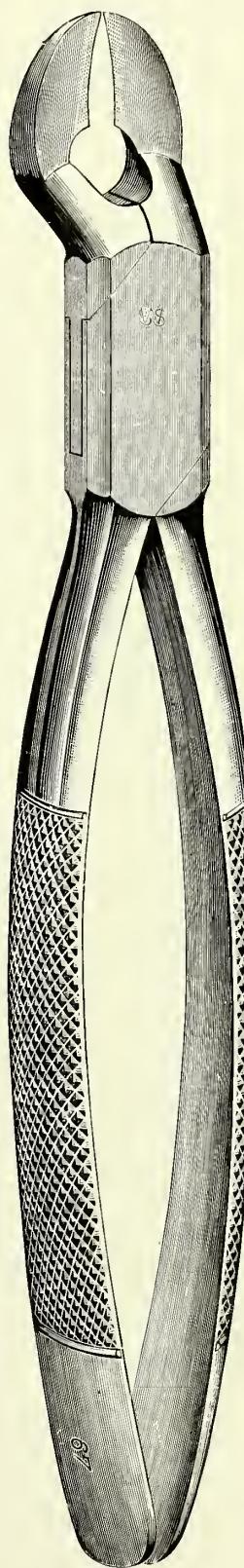
Splitting Forceps



No. 6. Splitting or Separating



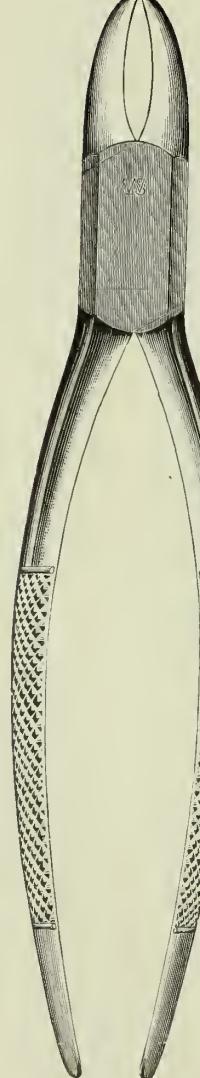
No. 66. Combined Root. Incising, Separating, Splitting, and Elevating, Lower
Designed by Dr. T. C. Stellwagen



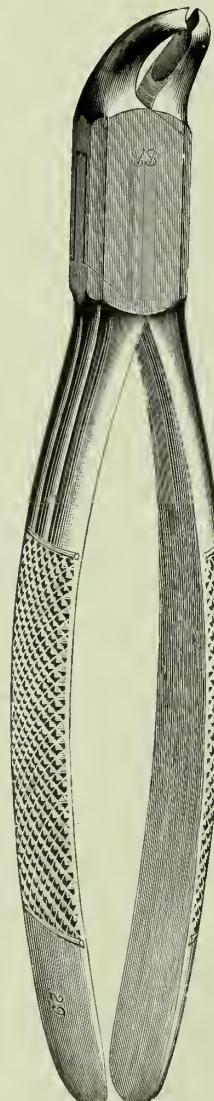
No. 67. Combined Root. Incising, Separating, Splitting, and Elevating, Upper
Designed by Dr. T. C. Stellwagen

No. 6	each	\$2.50
Nos. 66, 67	"	3.00

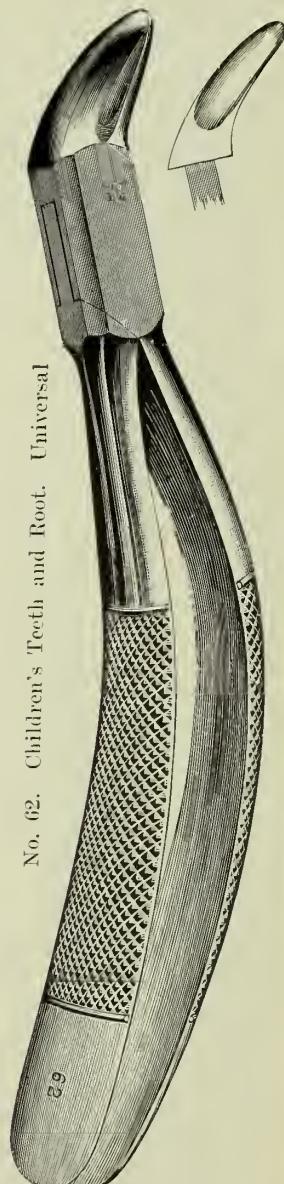
Children's Forceps



No. 30. Children's Teeth. Straight



No. 29. Children's Teeth. Curved



No. 62. Children's Teeth and Root. Universal

Nos. 30, 29, 62 each \$2.25

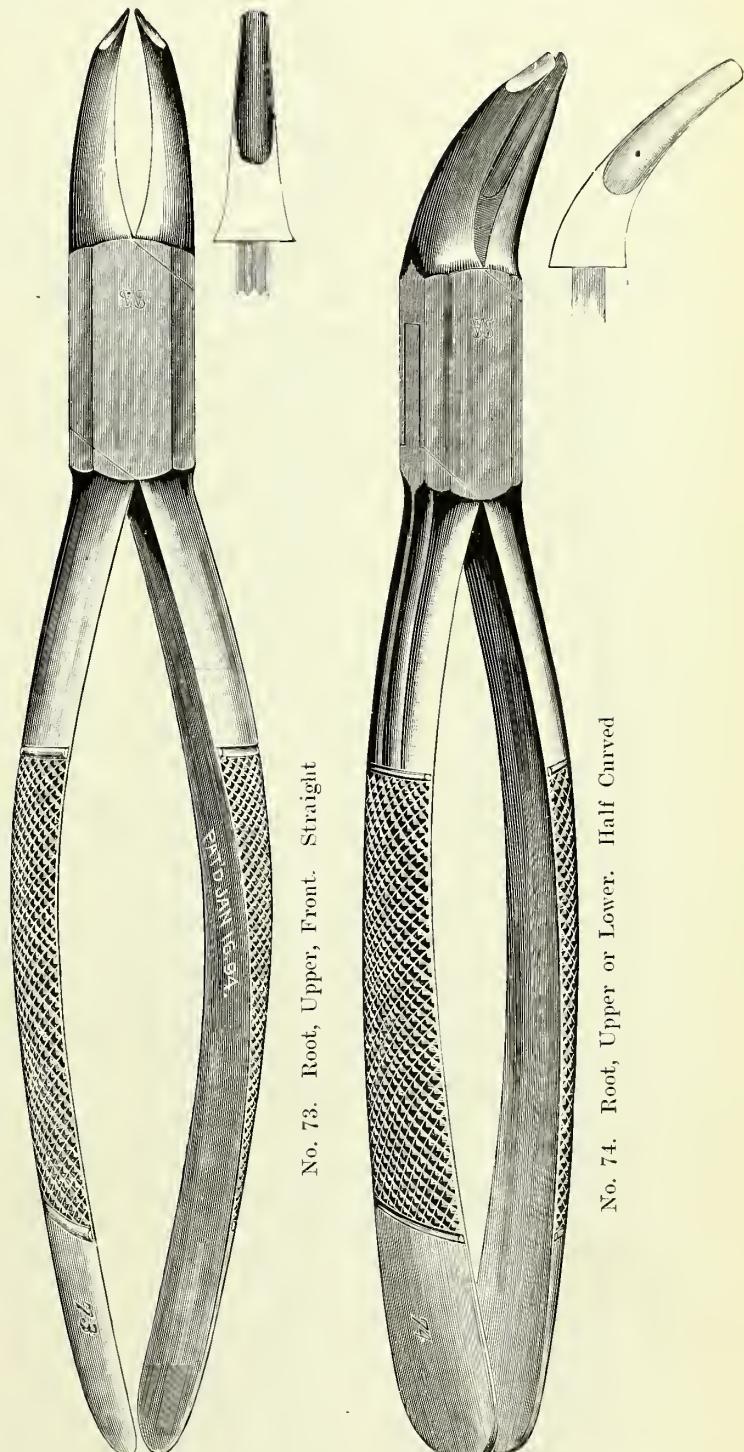
Sub-alveolar Thin-pointed Forceps

Designed by DR. AMBLER TEES

These Forceps (Nos. 73 to 77) are designed to pass into the tooth socket, to bring away roots or teeth the crowns of which are entirely decayed and broken off. The beaks are perfectly smooth inside, and being also very thin, and the outside slope very gradual, they may, after insertion between the root and alveolus, be forced up so as to grasp and hold on to the sound portion of the root, thus securing its safe extraction.

The peculiar merit of this style of Forceps and method of extracting is, that the natural edges of the walls of the alveolus are saved, and these on healing make the fullest and least irritable bases for artificial dentures.

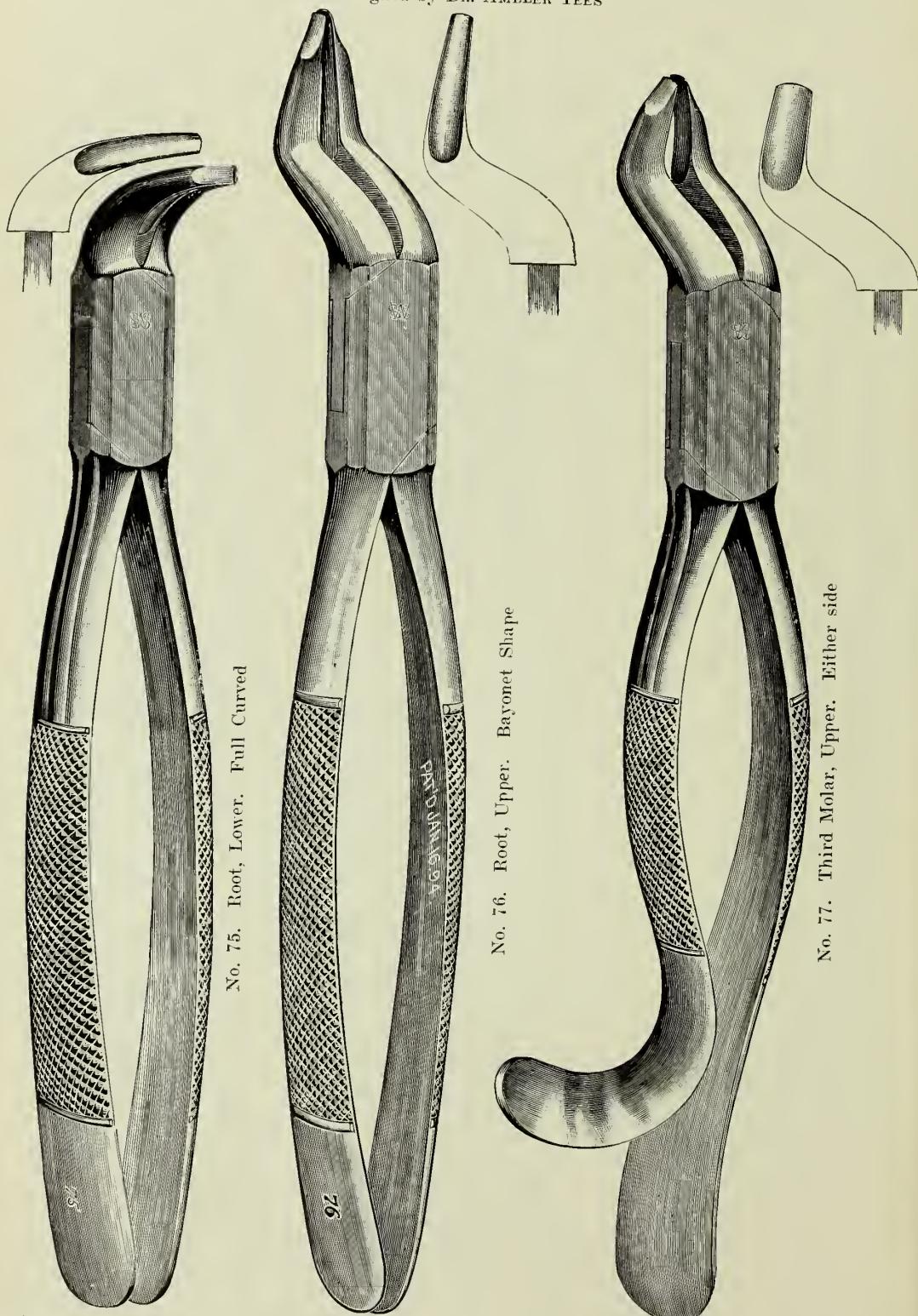
In using these Forceps care must be taken that the beaks grasp the root firmly before force is applied; otherwise the delicate points may chip. The points are not intended to bear the strain of extraction. Their office is simply to prepare the way for securing a firm grasp with the beaks proper. Every pair is thoroughly tested, and it will do all that we claim for it, but we cannot hold ourselves responsible for breakages caused in disregard of instructions.



Nos. 73, 74 each \$2.50

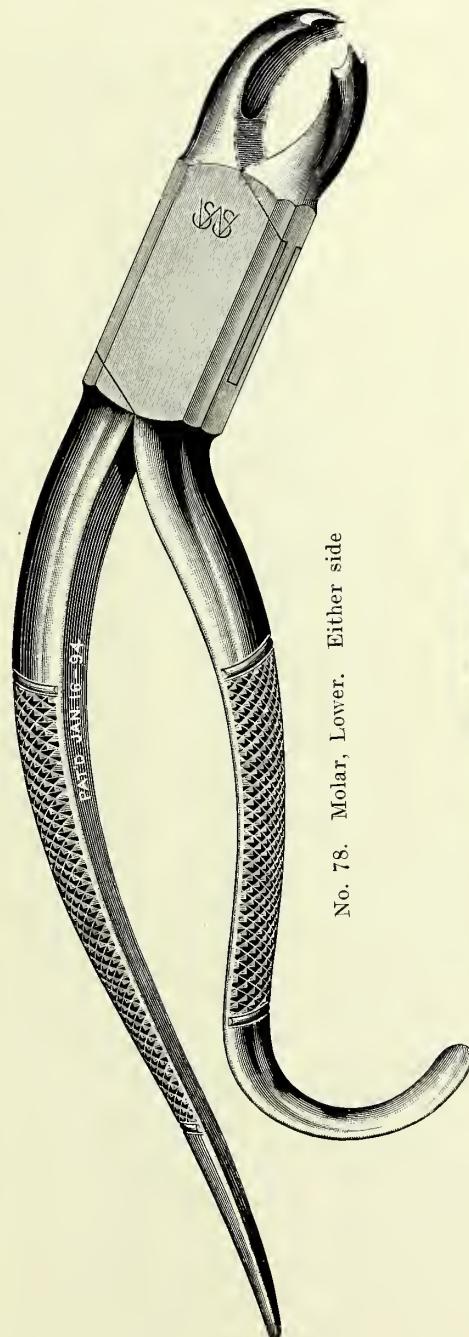
Sub-alveolar Thin-pointed Forceps

Designed by DR. AMBLER TEES

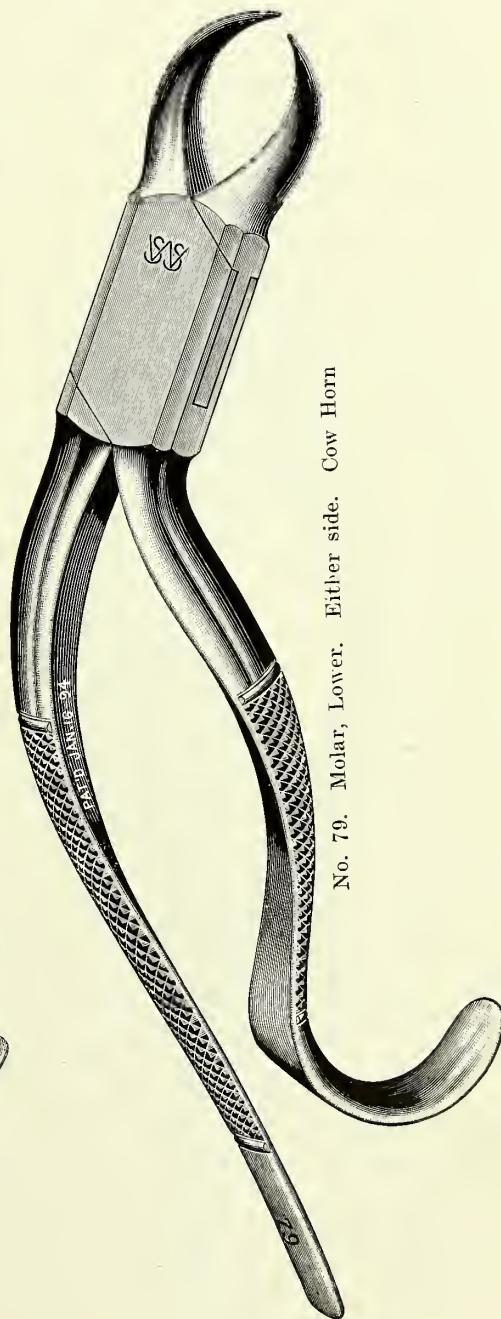


Nos. 75, 76, 77 each \$2.50

Prof. J. A. Watling's Forceps



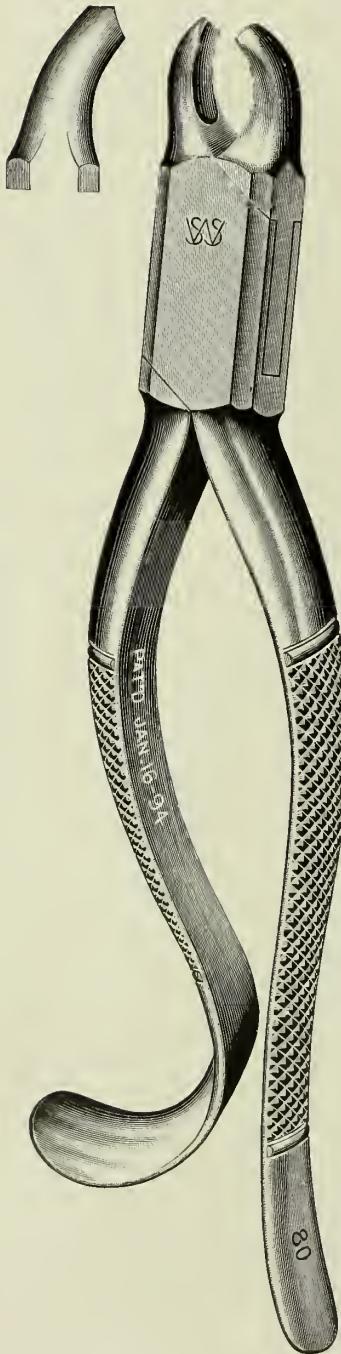
No. 78. Molar, Lower. Either side



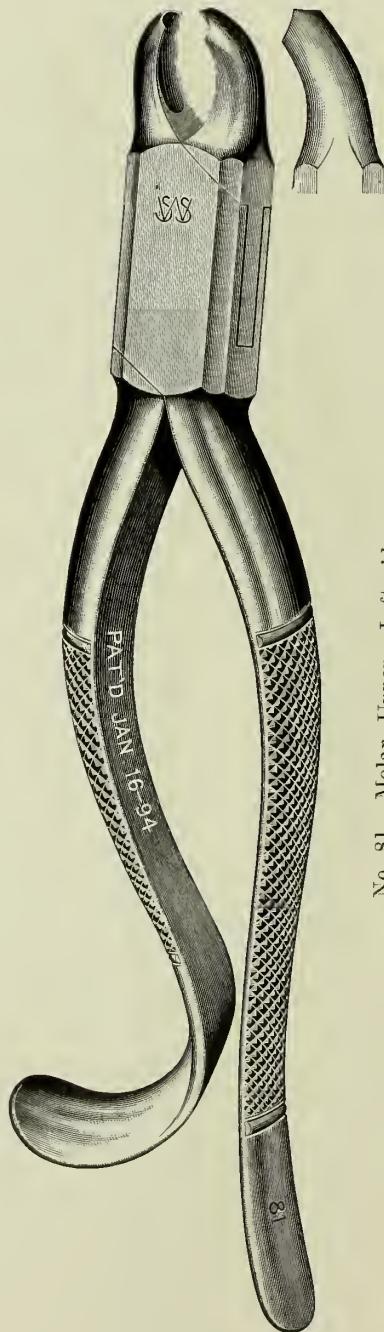
No. 79. Molar, Lower. Either side. Cow Horn

Nos. 78, 79 each \$2.50

Prof. J. A. Watling's Forceps



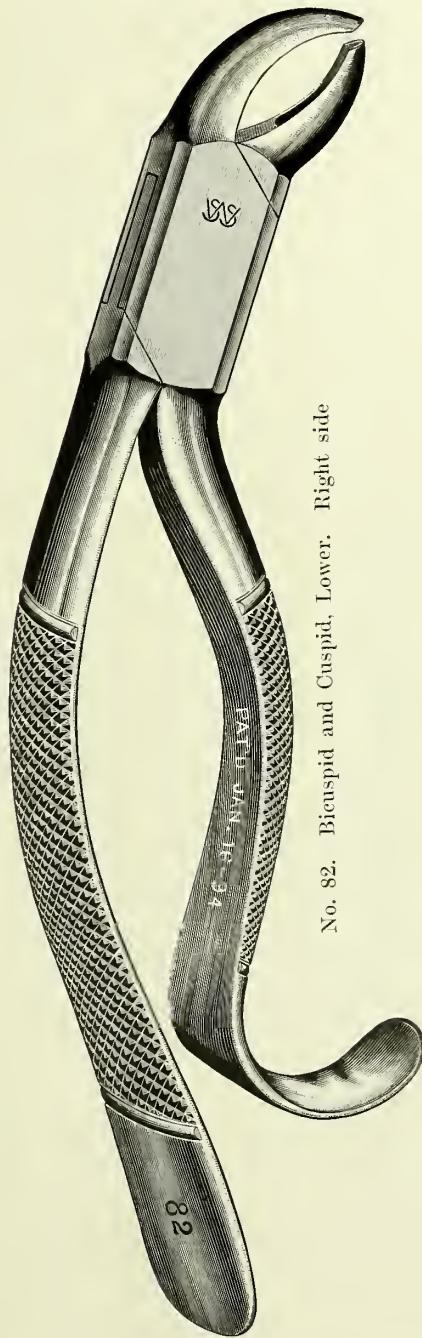
No. 80. Molar, Upper. Right side



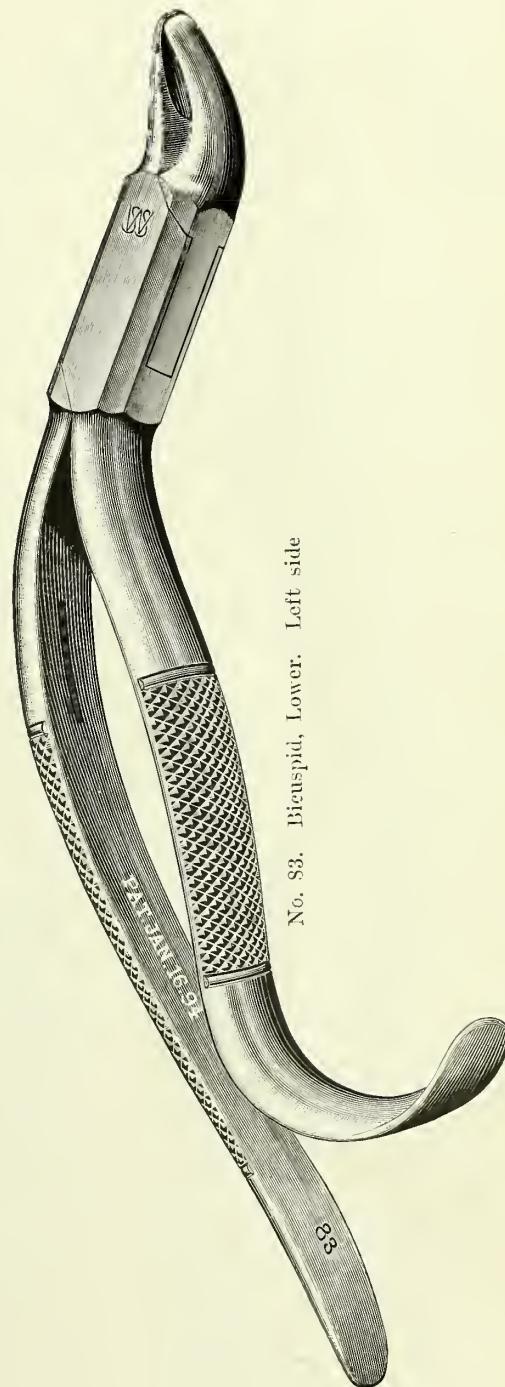
No. 81. Molar, Upper. Left side

Nos. 80, 81 each \$2.50

Prof. J. A. Watling's Forceps



No. 82. Bicuspid and Cuspid, Lower. Right side

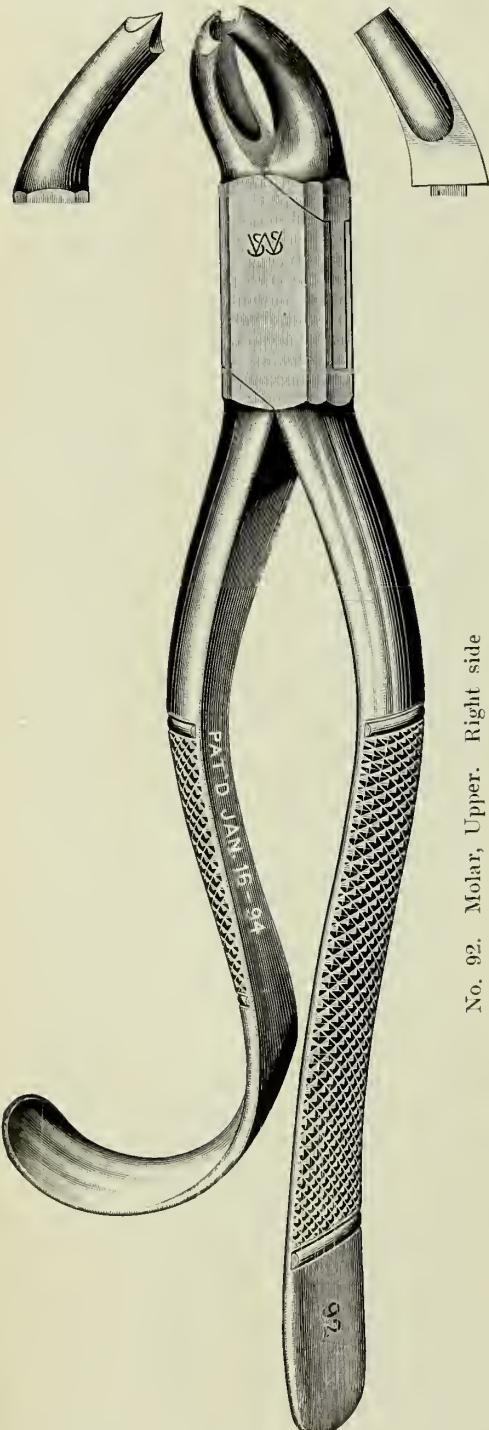


No. 83. Bicuspid, Lower. Left side

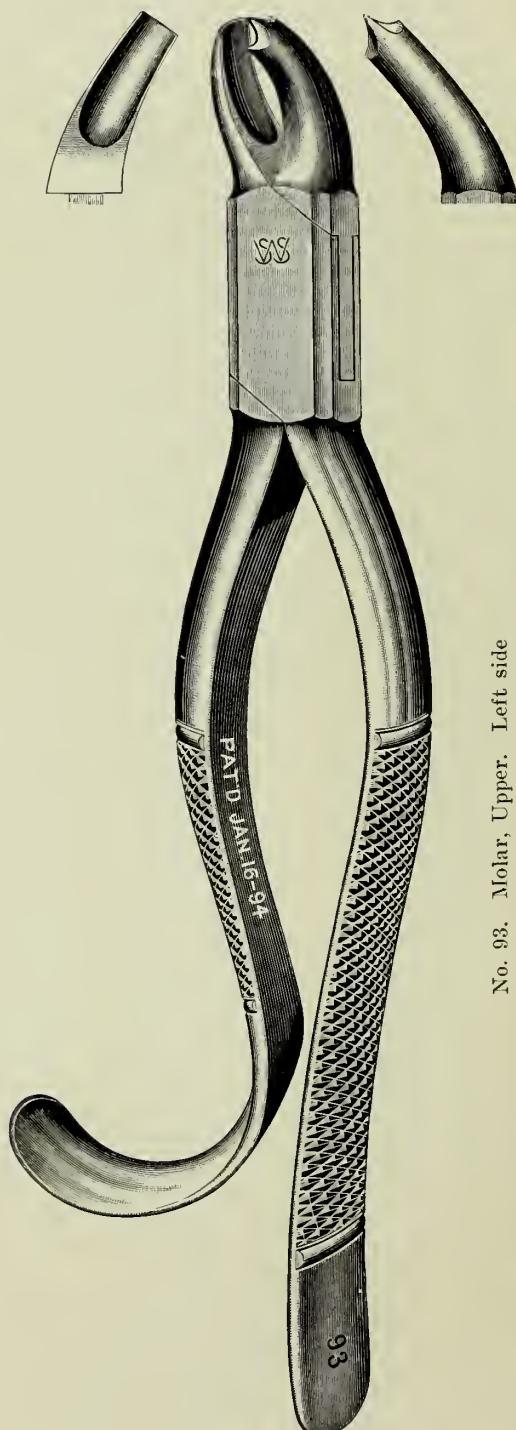
Nos. 82, 83 each \$2.50

Dr. Chapin A. Harris's Facsimile Forceps

The patterns for these Facsimile Forceps (Nos. 89 to 96) were made under the personal supervision of Dr. Chapin A. Harris, and kindly loaned to us by Professor R. B. Winder, of Baltimore. As we make them they are facsimile copies of those patterns, except that the serrations on the edges of the beaks are now omitted.



No. 92. Molar, Upper. Right side



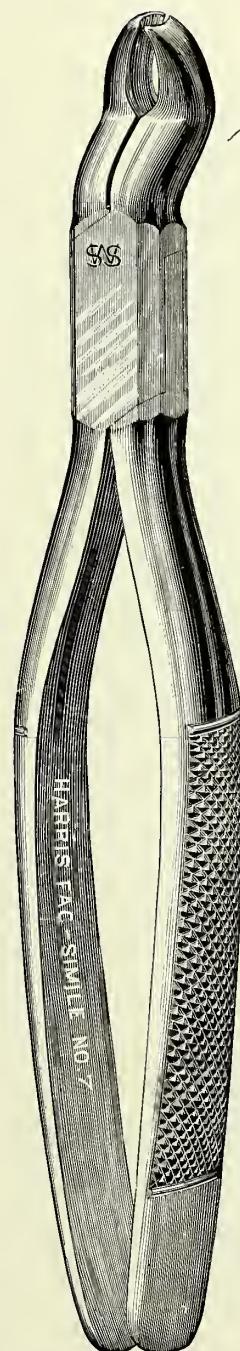
No. 93. Molar, Upper. Left side

Nos. 92, 93 each \$2.50

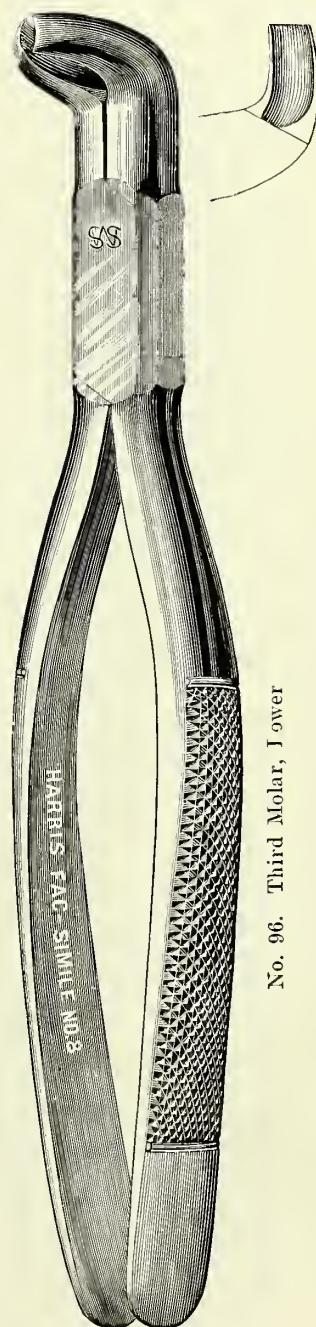
Dr. Chapin A. Harris's Facsimile Forceps



No. 91. Root, Universal



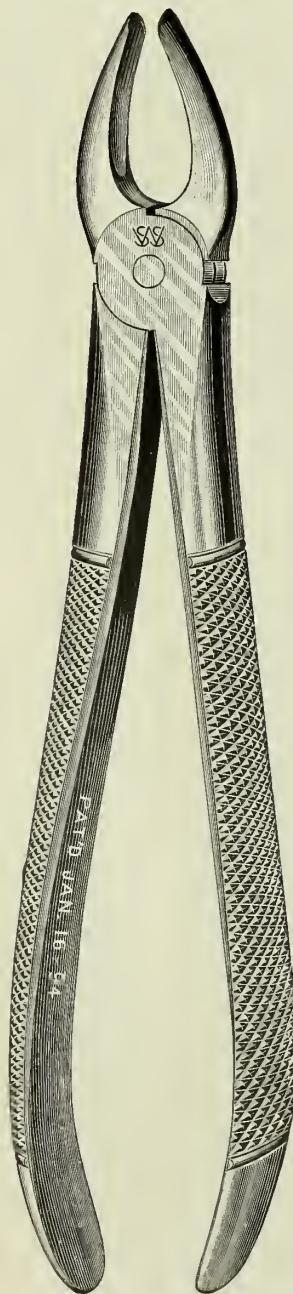
No. 95. Third Molar, Upper



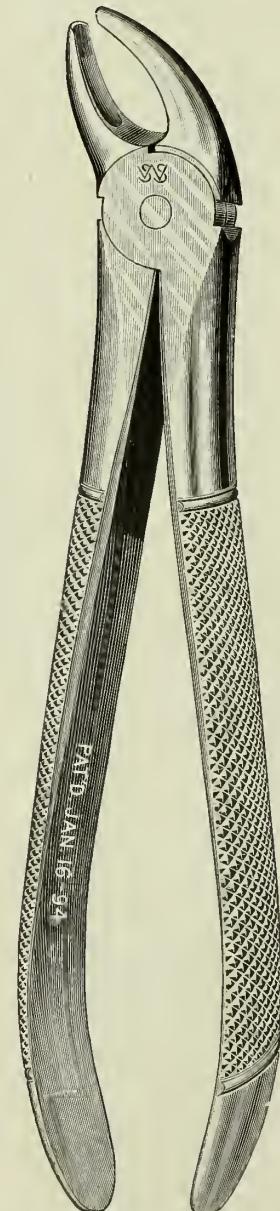
No. 96. Third Molar, Lower

Nos. 91, 95, 96 each \$2.50

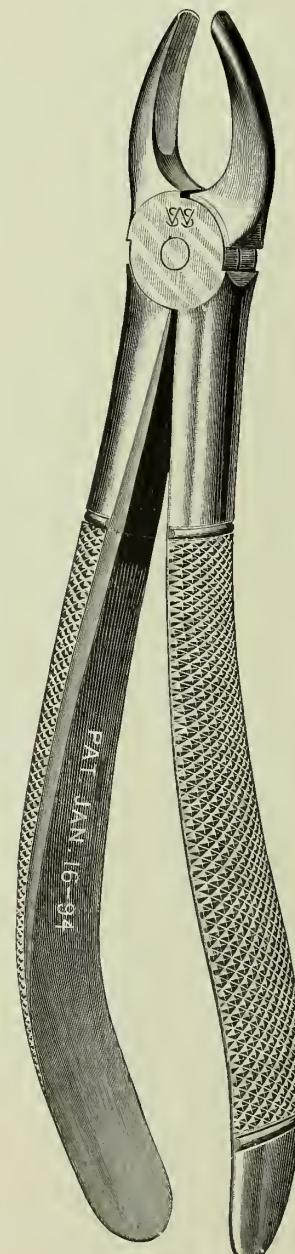
Knuckle-joint Forceps



No. 1. For Upper Centrals and Canines



No. 4. For Lower Incisors and Canines



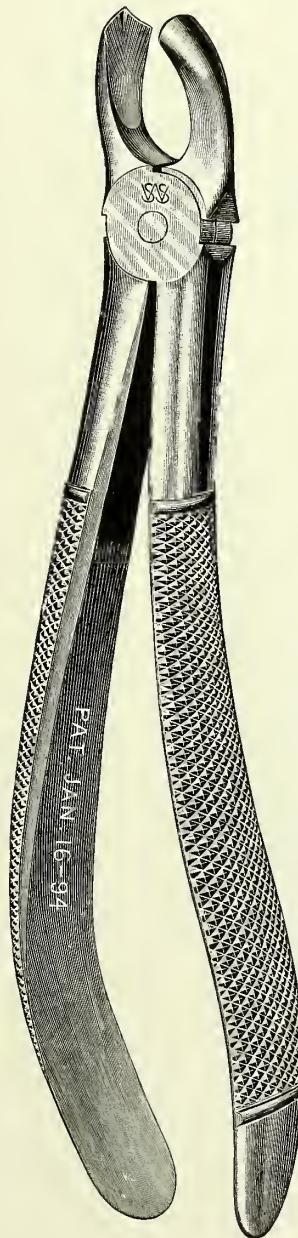
No. 7. For Upper Bicuspid

Nos. 1, 4, 7 each \$2.50

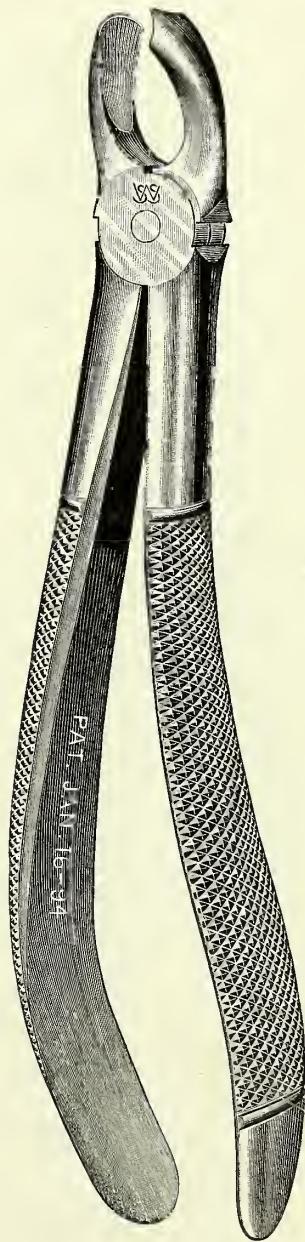
Knuckle-joint Forceps—Continued



No. 13. For Lower Bicuspid (Hawk-bill)



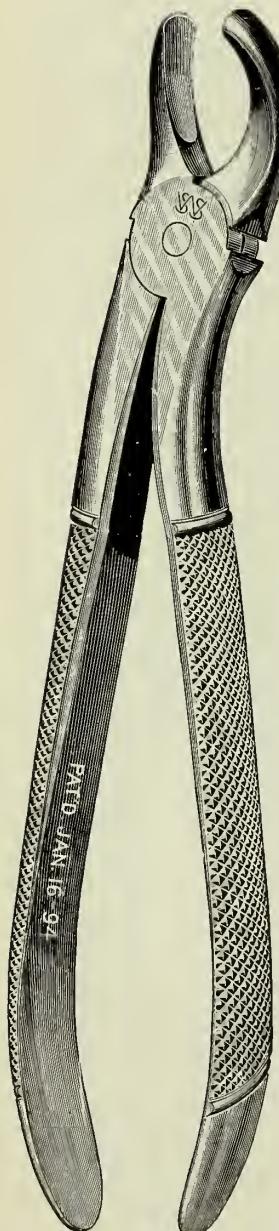
No. 17. For Right Upper Molars



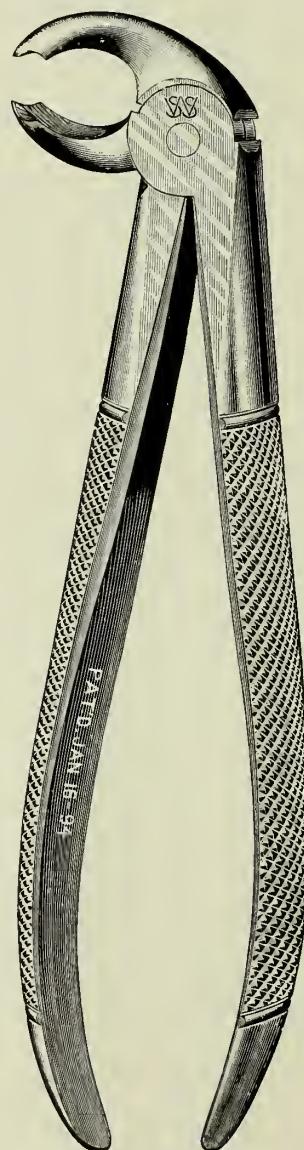
No. 18. For Left Upper Molars

Nos. 13, 17, 18 each \$2.50

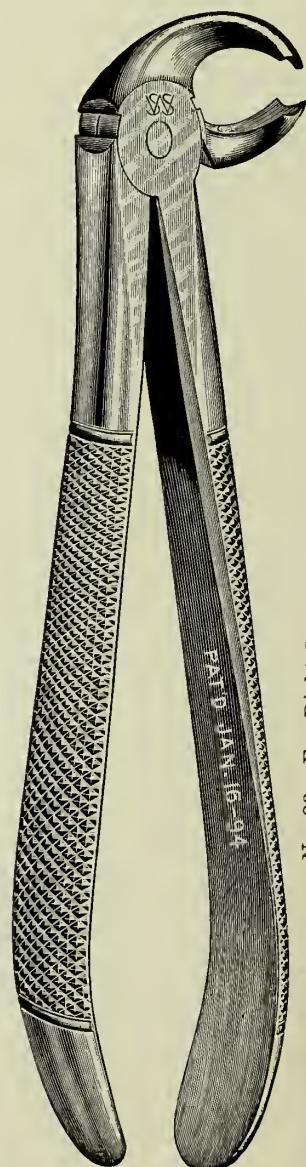
Knuckle-joint Forceps—Continued



No. 19. For Upper Third Molars



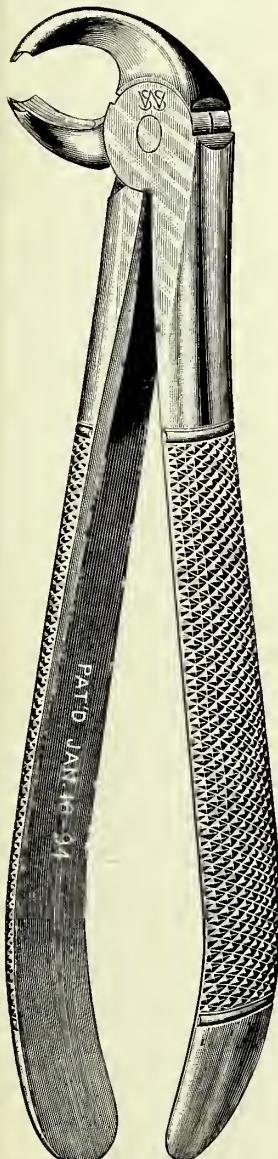
No. 22. For Lower Molars (Hawk-bill)



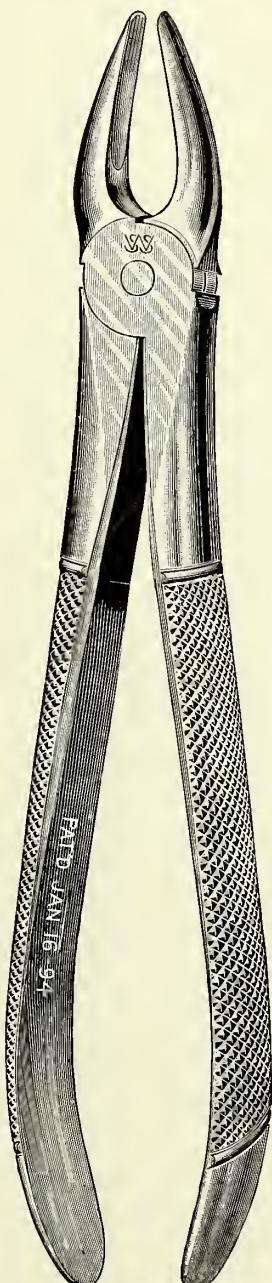
No. 23. For Right Lower Molars

Nos. 19, 22, 23 each \$2.50

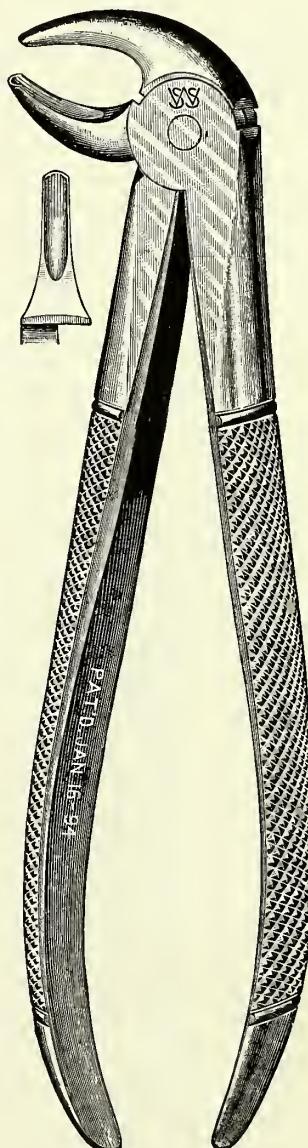
Knuckle-joint Forceps—Continued



No. 24. For Left Lower Molars



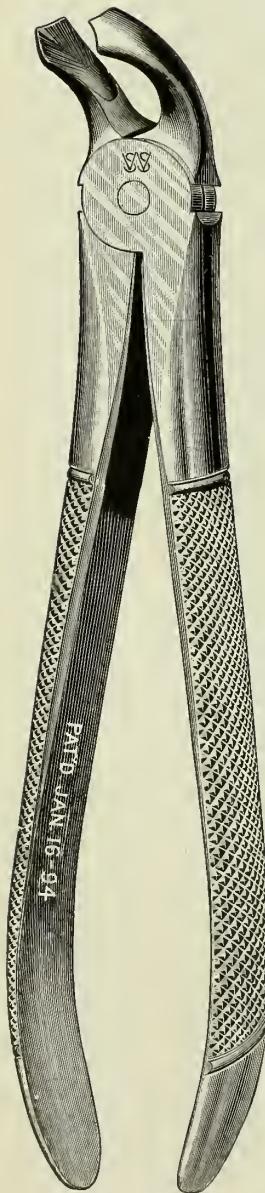
No. 29. For Upper Roots



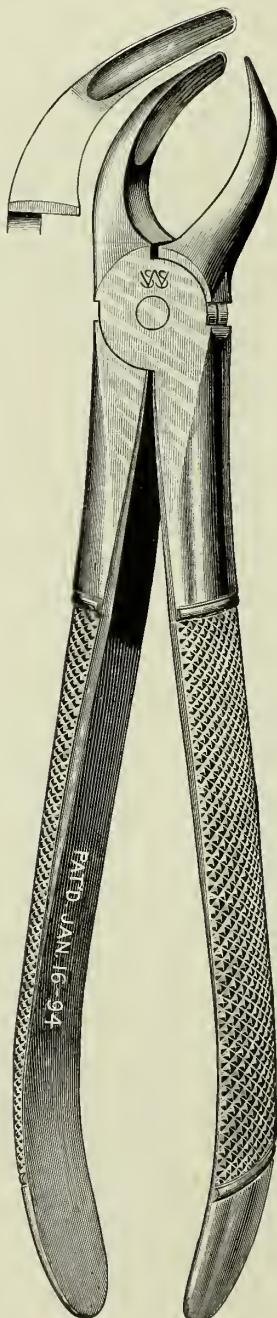
No. 33. For Lower Roots

Nos. 24, 29, 33 each \$2.50

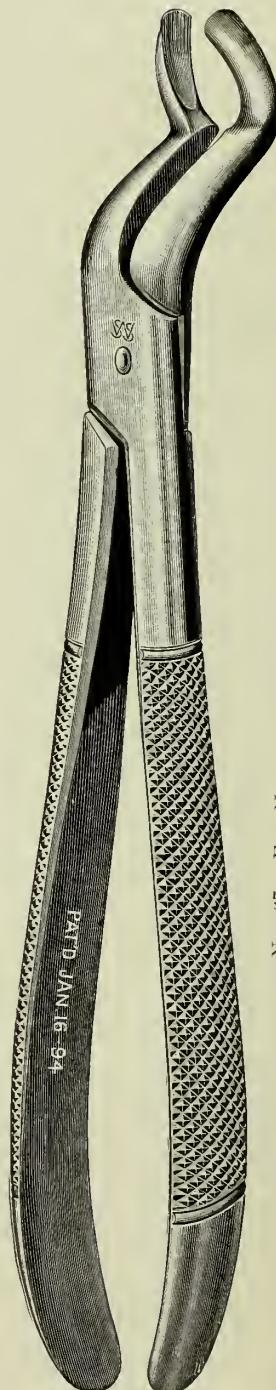
Knuckle-joint Forceps—Continued



No. 40. For Children's Lower Molars



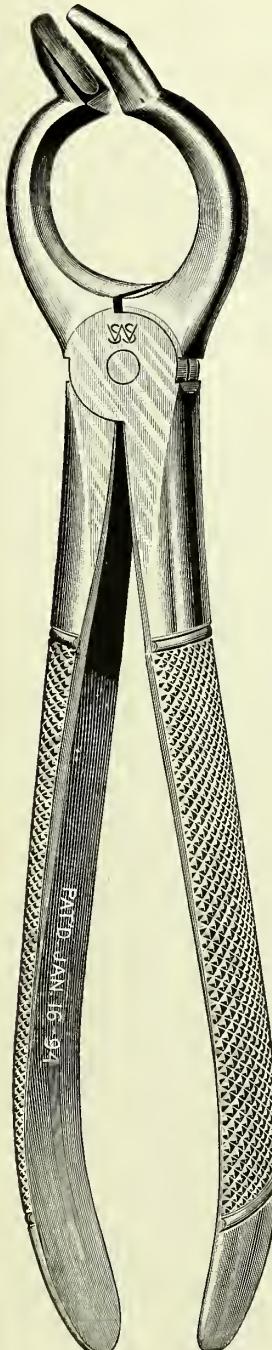
No. 48. For Lower Roots



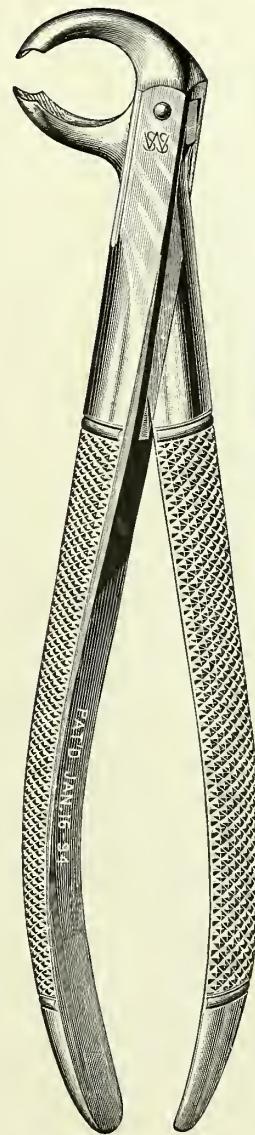
No. 67. For Upper Third Molars

Nos. 40, 48, 67 each \$2.50

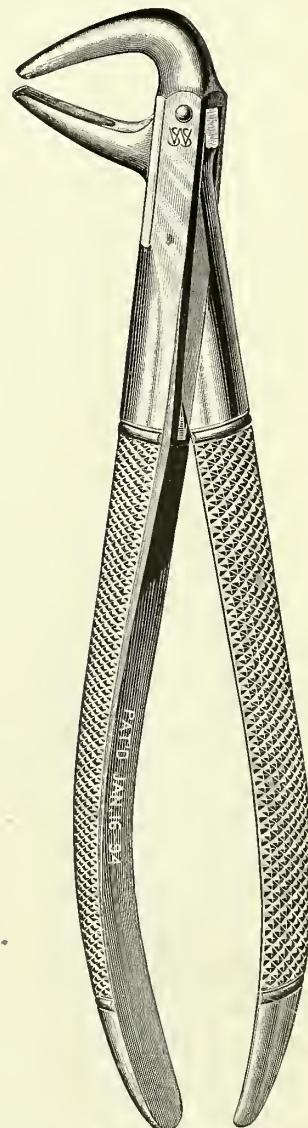
Knuckle-joint Forceps—Continued



No. 68 A. For Lower Roots



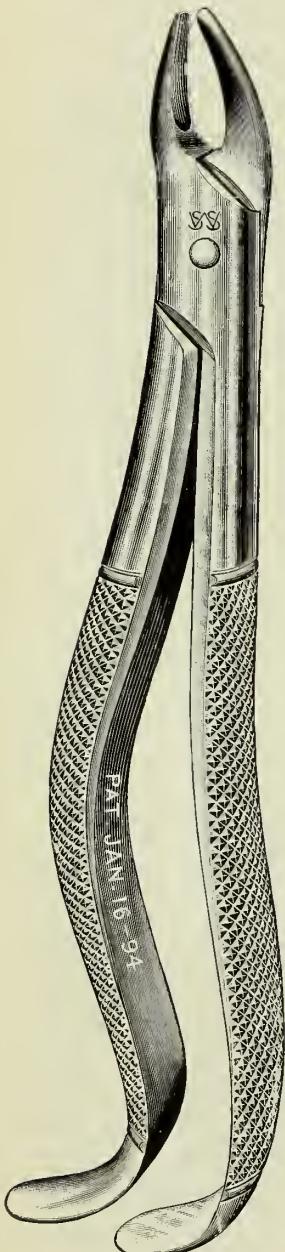
No. 73. For Lower Molars (Hawk-bill)



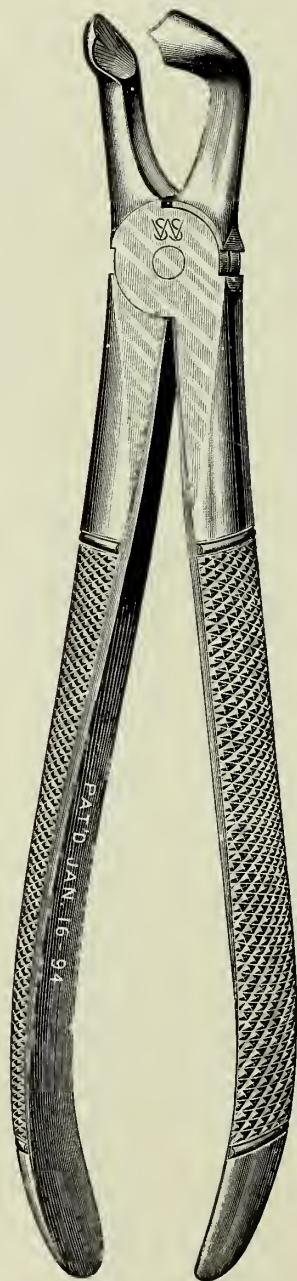
No. 74. For Lower Roots (Hawk-bill)

Nos. 68 A, 73, 74 each \$2.50

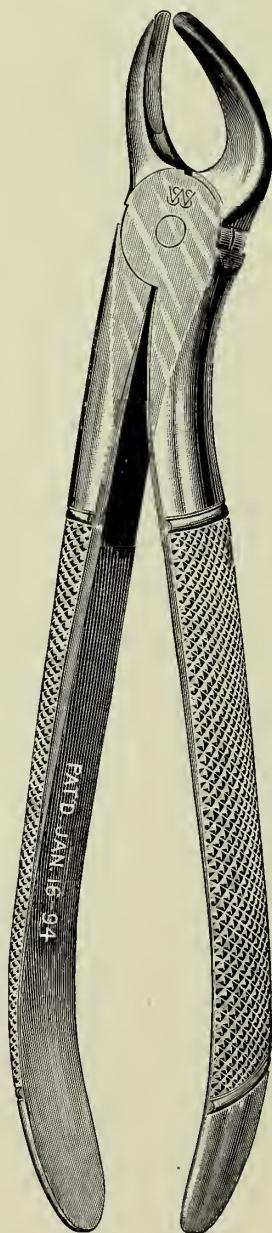
Knuckle-joint Forceps—Continued



No. 76 A. For Upper Roots



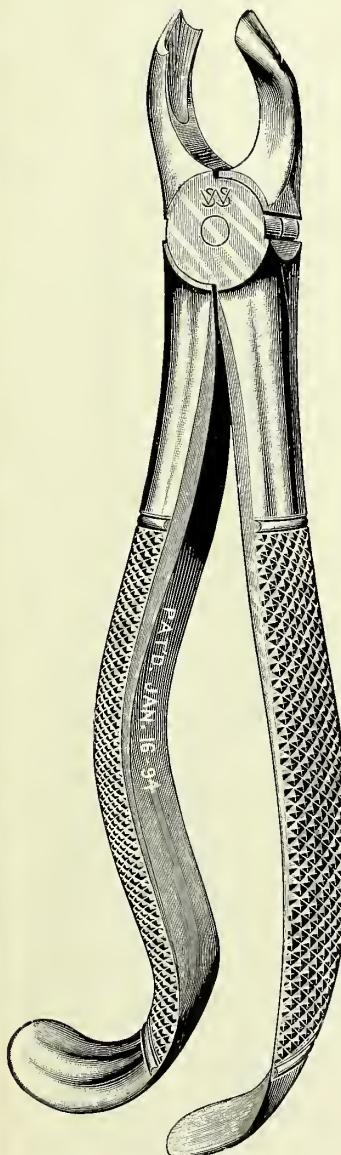
No. 79. For Lower Third Molars



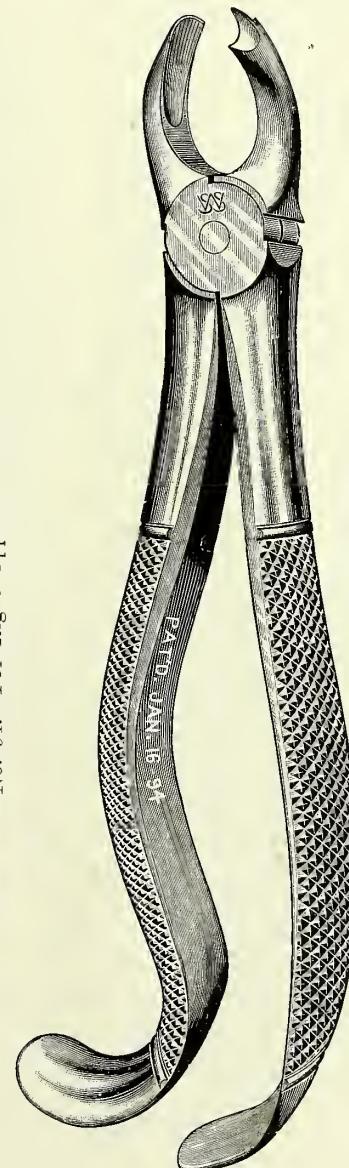
No. 80. For Upper Molar Roots

Nos. 76 A, 79, 80 each \$2.50

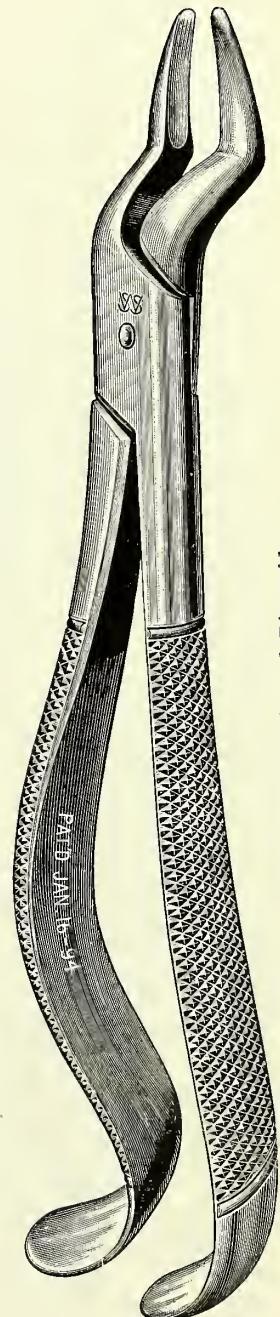
Knuckle-joint Forceps—Continued



No. 94. For Right Upper Molars



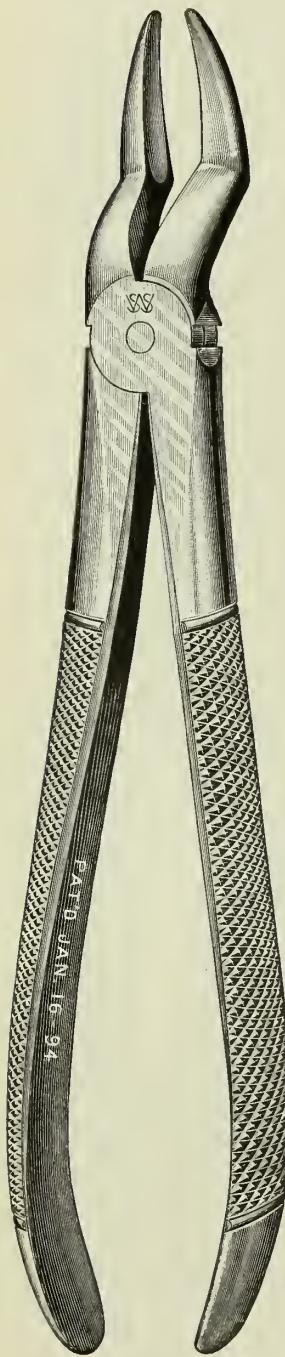
No. 95. For Left Upper Molars



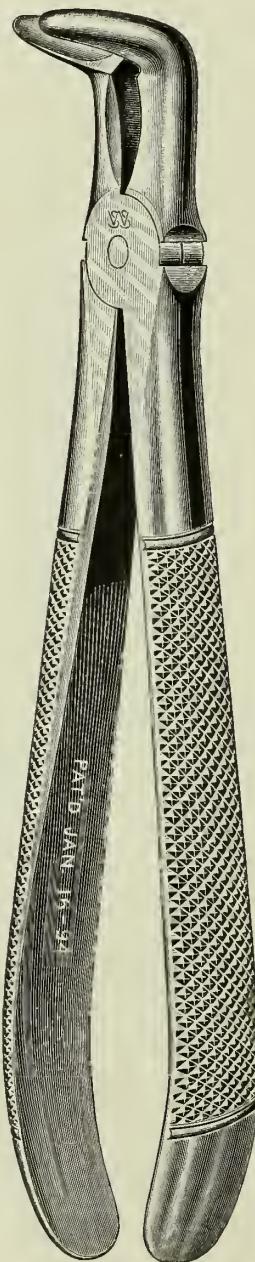
No. 101. For Upper Roots and Bicuspids

Nos. 94, 95, 101 each \$2.50

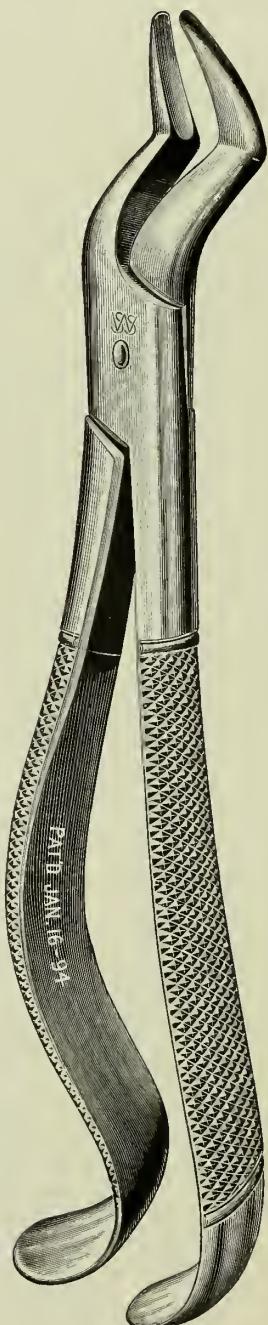
Knuckle-joint Forceps—Continued



No. 52 A. Resection Forceps, with smooth beaks and straight handles

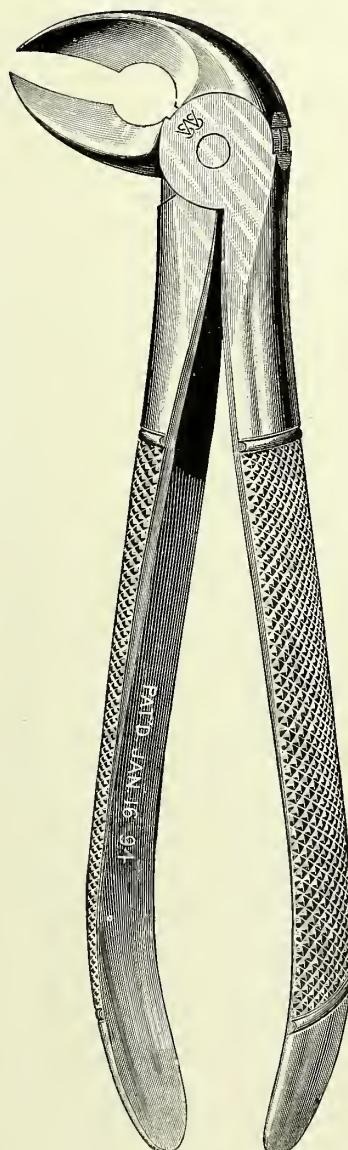


No. 79 A. Resection Forceps for Lower Third Molars



Nos. 52 A, 79 A, 104 each \$2.50

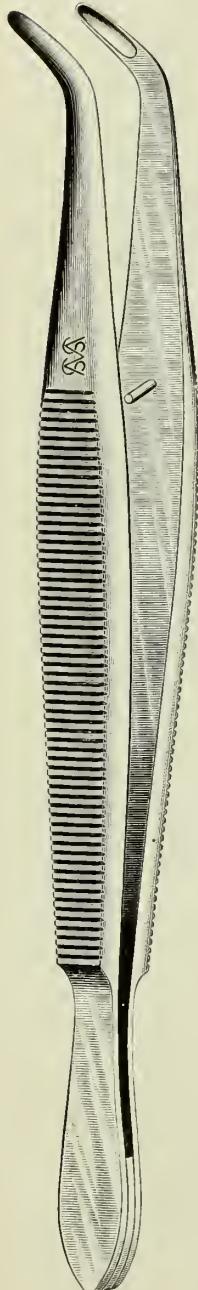
Knuckle-joint Forceps—Continued



No. 4 B. Lower Splitting (Hawk-bill)



No. 5 B. For Lower Roots (Hawk-bill) Resection beaks



Root Pliers No. 61

Devised by Dr. A. BROM ALLEN

These Pliers are intended, not for the actual extraction of firmly imbedded roots but for the removal of portions or slivers broken off the root in extracting, and for probing the socket and removing loose remaining bits of the alveolar process. A third important use is the removal of deciduous crowns loosened by the resorption of their roots.

For these purposes they will be found very efficient, having ample strength, but with delicately formed, long-curved points, which are hollowed out like the beaks of extracting forceps, on spring handles. The guide pin assures the accurate working of the points and the stop prevents their spreading under too strong pressure.

They can be grasped as forceps are, but, usually, it will be found that holding them as Pliers are held, between the thumb and forefinger, will give a more delicate tactile touch with ample power. The finger grip is cross-filed and slightly eoneaved.

Equally adapted to the upper and lower jaws.

Finely finished, and nickel plated all over.

Root Pliers No. 61 \$2.00

Root Extractors

The Root Extractors Nos. 20 and 21, here represented, are right and left instruments, generally applicable to frail roots that have slight attachment or are merely embedded in the gum. Such roots are usually crater-like and present thin edges, easily crushed by forceps.

The points of the Extractors are concave, and will closely fit the convexity of the root. The edge is very sharp, and curved to the form of the gum margin, beyond which it may be easily forced.

The bend of the shank affords an unobstructed view of the operation. These Extractors are much longer than our regular line, and give an easy reach to the posterior teeth, while the handle of ebonized wood is formed to admit of a forward grip in extracting anterior roots.

The illustrations are full size.

Price each \$1.00



21

Third Molar—Right and Left

Designed by DR. J. F. CANINE

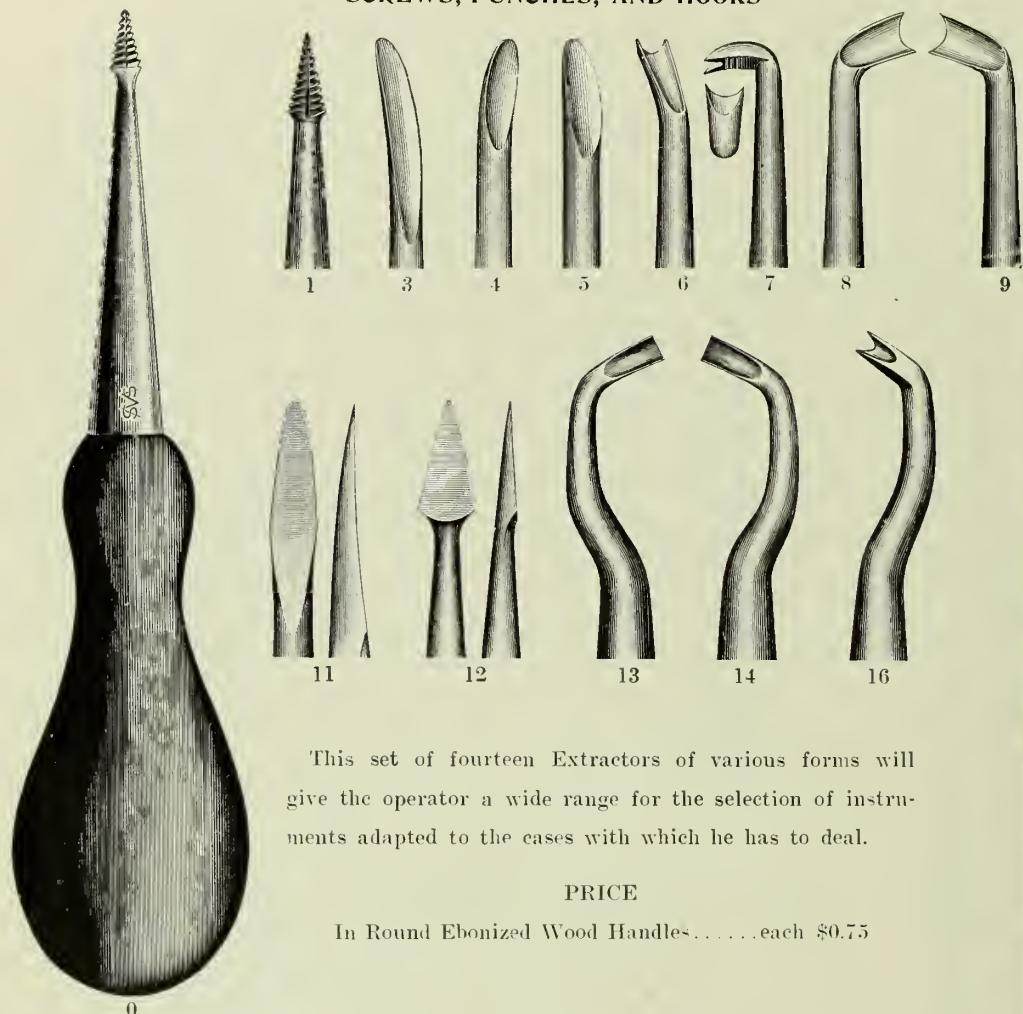
A pair of Right and Left Extractors, especially adapted for third molars in either jaw. The cross section shows the peculiar shape of the double-groove blades, with one rounded and one sharp edge, these being reversed on the opposite side. The blade is forced from the buccal side as a wedge between the third molar and the molar next to it, with the lower sharp edge presenting toward the neck of the third molar, and the upper toward the crown of the adjoining tooth. Twisting the handle slightly in the proper direction engages the blade under the border of the enamel of the third molar, and the tooth is then readily elevated out of its socket in the direction of the curvature of its roots, the adjoining tooth serving as a fulcrum. The insertion of the instrument is accomplished with little inconvenience to the patient because of its wedge shape and the separator-like edge of the point.

Price, in Ebonized Wood Handles, each \$1.75



20

Root Extractors SCREWS, PUNCHES, AND HOOKS

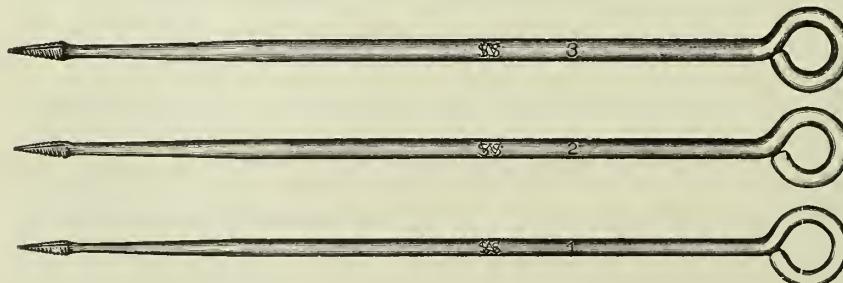


This set of fourteen Extractors of various forms will give the operator a wide range for the selection of instruments adapted to the cases with which he has to deal.

PRICE

In Round Ebonized Wood Handles.....each \$0.75

Morrison Reamer and Screw-Portes



The Reamer is used to enlarge the openings into the canals of badly decayed roots to permit the entrance of the Screw-Porte for their extraction. Three sizes of the Screw-Portes are made, to suit differences in roots. The Reamer is made only on Octagon Handle.

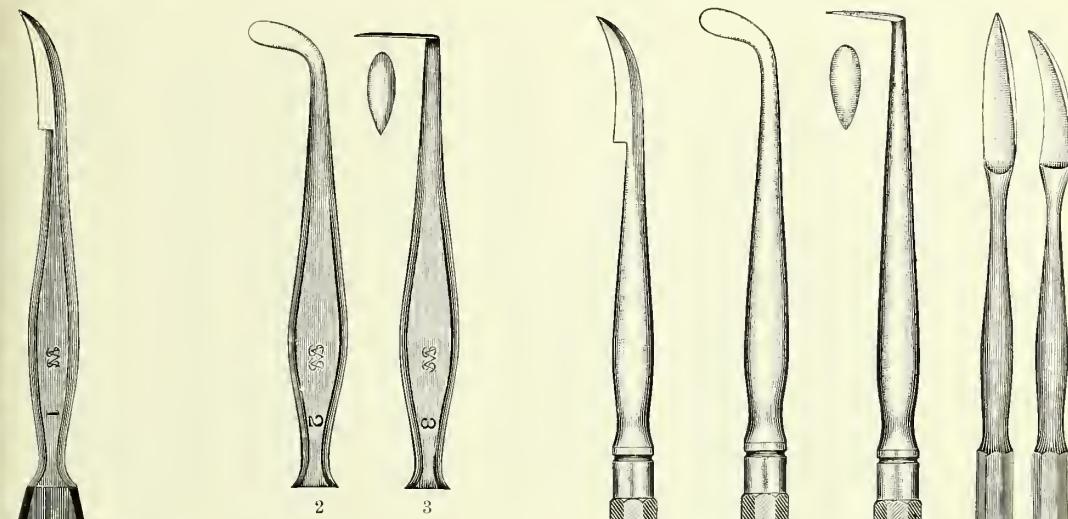
The complete set is put up in a neat box with spaces let into a wood block to keep the instruments in place when not in use.

PRICES

Per Set, in Box	\$2.00
Reamer50
Screw-Portes	each .50
Not kept in stock for Cone-socket Handles.	

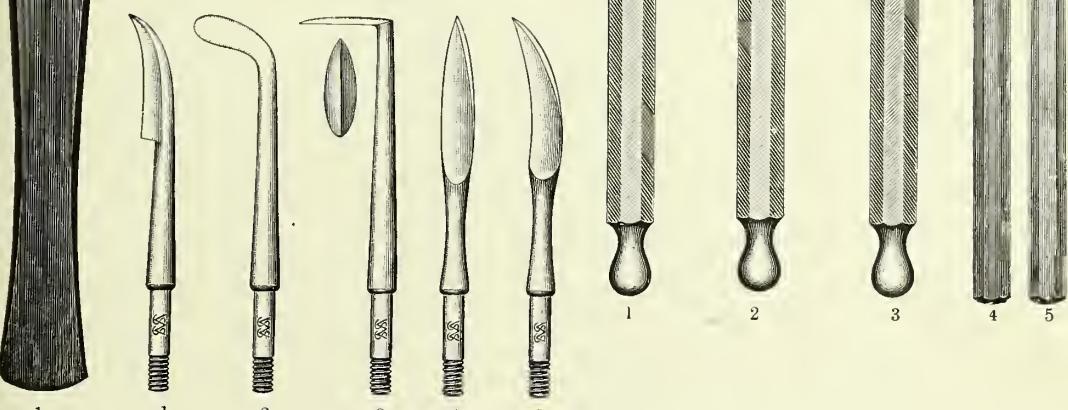
Lancets

FIXED BLADES



Lancets Nos. 1 to 3 are made with Ebony handles, Nos. 1 to 5 with solid steel handles, and with short shanks for use in Cone-socket handles. In Steel handles Nos. 1 to 3 are quarter-inch File-cut, Nos. 4 and 5 plain Octagon.

Cone-socket Blades

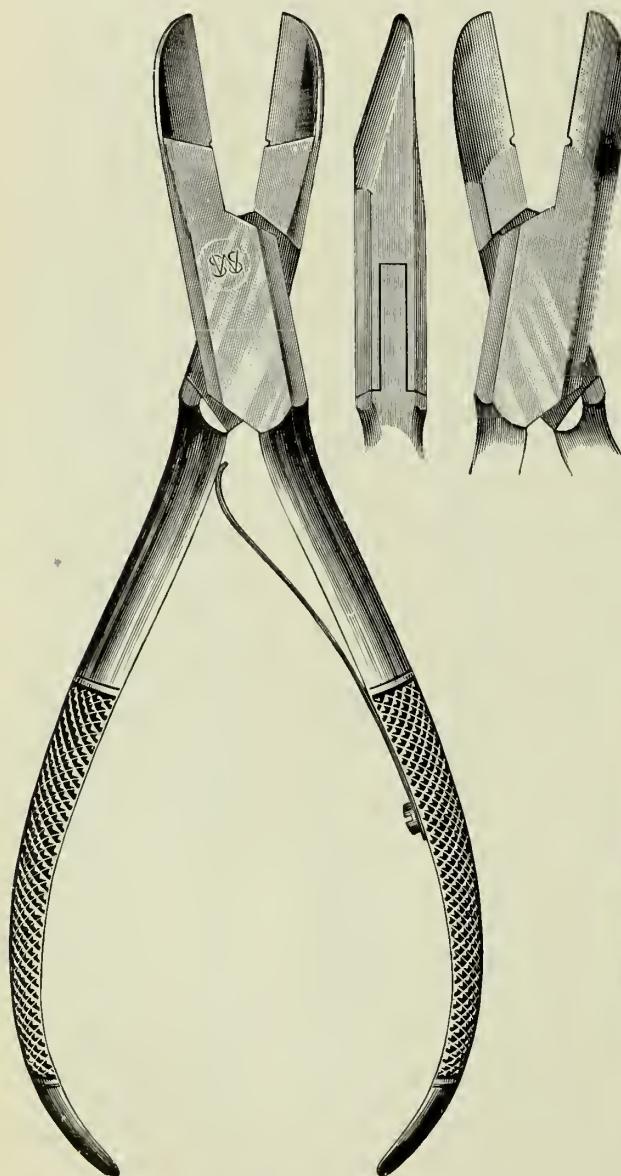


PRICES

Ebony Handle (Nos. 1, 2, and 3)	each	\$0.60
Steel Handle, $\frac{1}{4}$ -in., File cut (Nos. 1, 2, and 3)	"	.50
Steel Octagon Handle, Abscess (Nos. 4 and 5)	"	.38
Steel Cone-socket Blades	"	.35

Wedge Cutter and Wedge Compressor

Design of DR. CHAS. MILLER



No. 3

In the No. 3 Wedge Cutter the parts between the blades and the joint are made broad and flat, and come together like pliers to compress the wedge before it is inserted. Thus condensed it may be put in without great force or painful driving, and will afterward expand so as to be very effective.

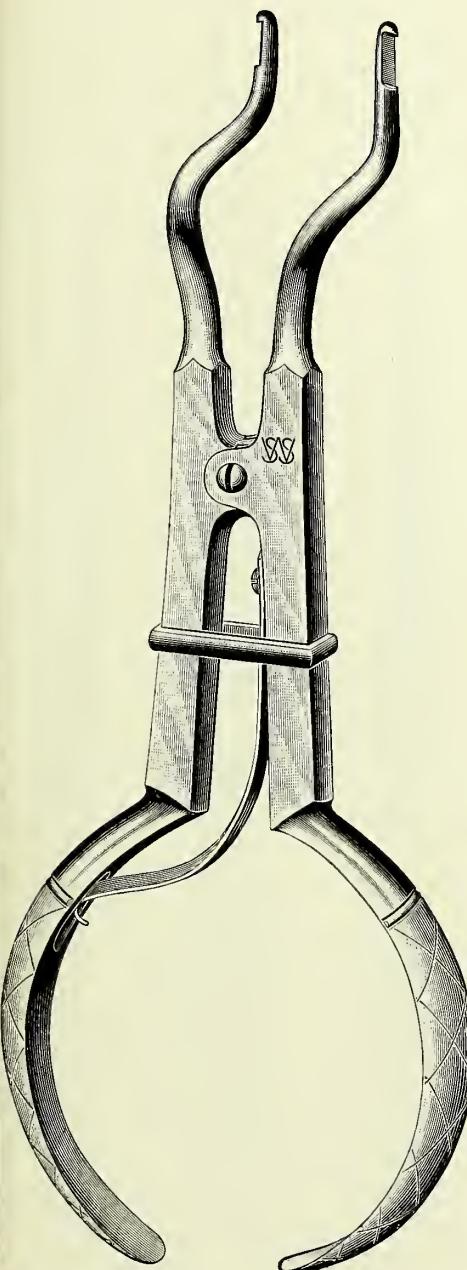
Price \$3.50

Manicure Forceps

Price \$3.50

These Manicure Forceps are in all respects—material, workmanship, finish, and adaptability to their special uses—equal to our regular forceps.

Rubber-dam Clamp Forceps



Bowman-Allan

Adapted for all Clamps
except Nos. 85 to 119

The Brewer Universal

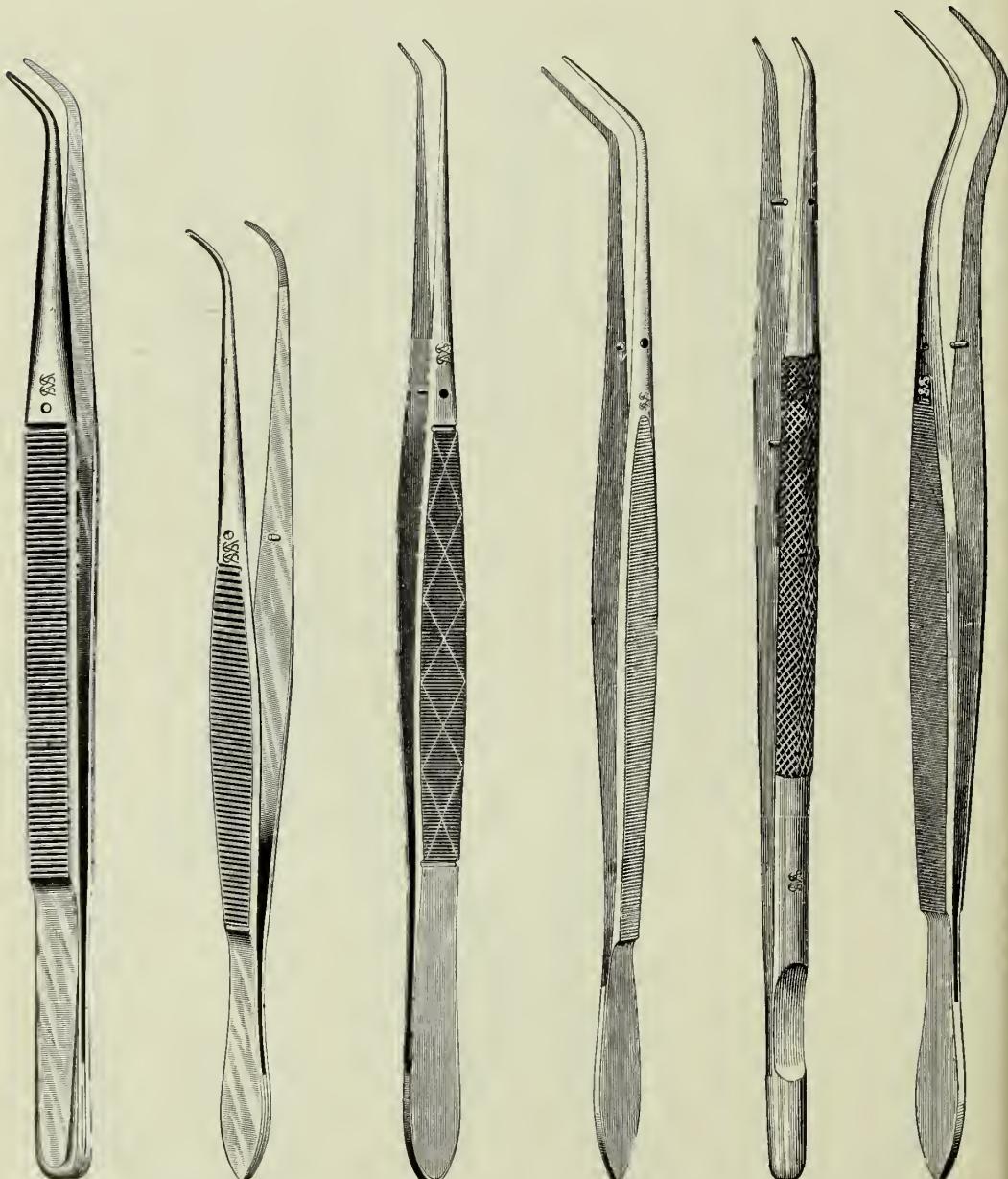
For all Clamps
except Nos. 70 to 75

PRICES

Brewer Universal	\$2.75
Bowman-Allan	2.25

Foil Carriers

Plugging Pliers



No. 11
College
\$1.00

Designed to meet all the needs of the student or young practitioner. Adapted for drying cavities, for applying medicaments, for annealing, softening, and conveying filling materials.

No. 12
**Dr. Perry's
Annealing**
\$1.00

The slender points permit the gold to be perfectly annealed by one immersion in the flame.

No. 20
**Dr. Watling's
Annealing**
\$1.25

Light and strong, perfectly balanced, with points long and slender and nicely curved, the chief advantage is in the delicacy of the spring and its perfect control.

No. 17
**Dressing
Pliers**
\$1.25

While primarily intended for dressing purposes, they are preferred and used as foil carriers by many operators.

No. 2
**Octagon
Handle**
\$1.75

The angle and the serrations of the points make a very useful pair of Plugging Pliers.

No. 18
**Meriam's
Long Reach**
\$1.25

Specially adapted for use with matrices and separators.

Inlay Matrix Pliers



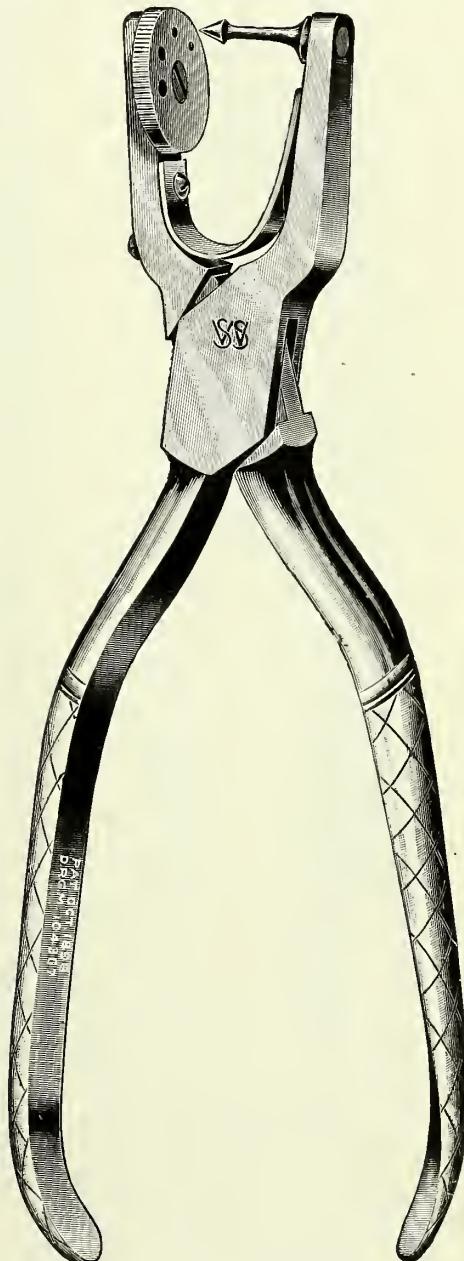
No. 60

The beaks have ball points with flat inner faces, serving the double purpose of carrying the foil safely to the cavity and of forcing it into every inequality of the walls, with the aid of a pad of cotton. Will also be found superior to pliers with sharp beaks in manipulations where there is risk of puncturing the foil.

Price \$1.75

The Perfected Rubber-dam Punch

Patented January 16, 1894; October 18, 1898

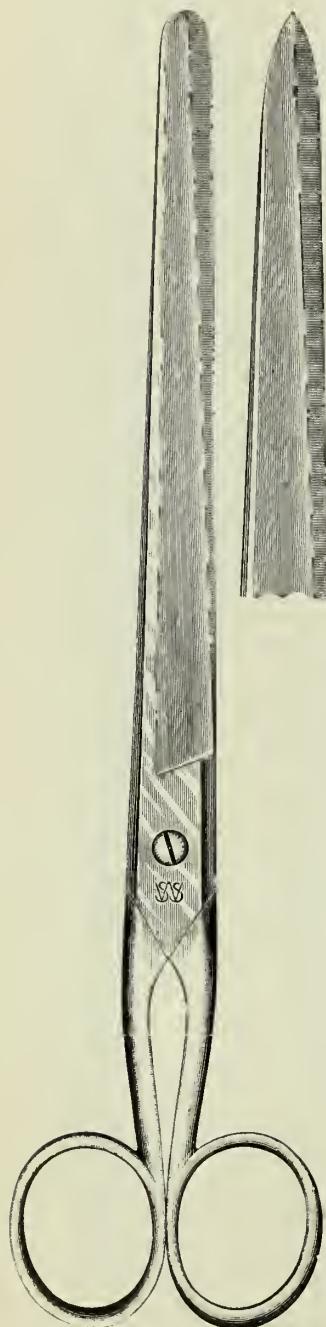


In this appliance a flexible-stemmed punch perfectly impinges upon the edge of each of the four dies and insures a quick, clean cut without liability to strike the side of the hole, fail to make a complete cut, or damage the die. The Perfected Punch cuts perfect perforations, and by reason of its construction is durable.

The handles are specially adapted to the hand, being made on the well-known "Common-sense" principle.

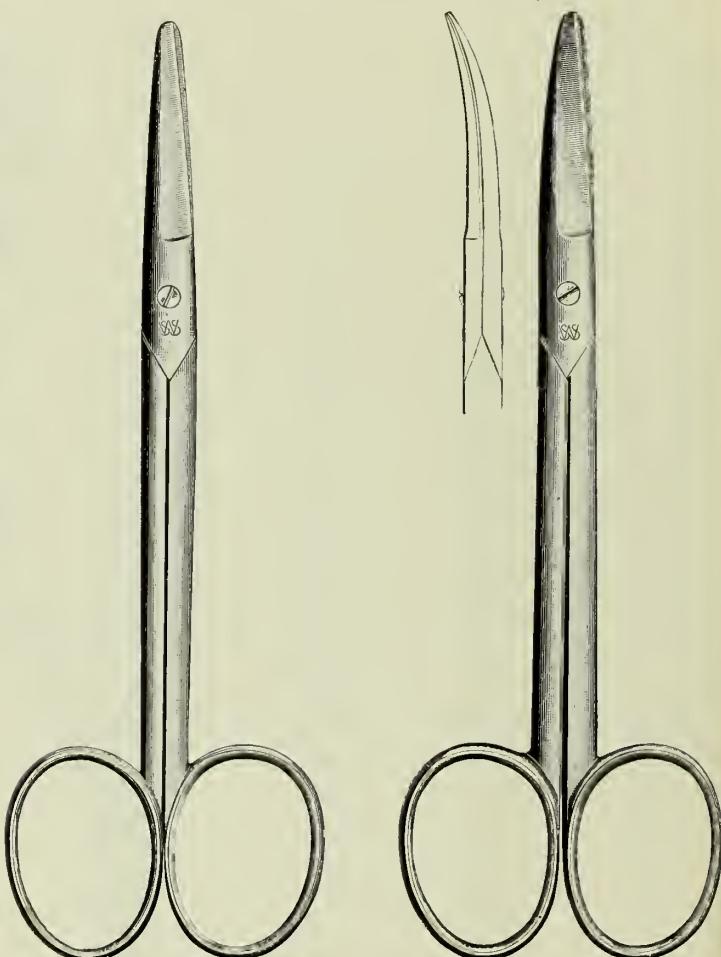
Price \$3.25

Foil Scissors



Gum Scissors

(ILLUSTRATIONS FULL SIZE)



No. 21

No. 22

The line of Gum Scissors illustrated on this and the following pages are, as the trade-mark on them denotes, made in our own factory; and from the selection of the steel to the final finish, every care has been taken to produce a line of the highest-class surgical instruments. These *are* surgical instruments, made to cut living tissue, and, though they are classed as scissors, they differ in quality from the ordinary scissors of commerce as much as the surgeon's scalpel differs from a table-knife.

PRICES

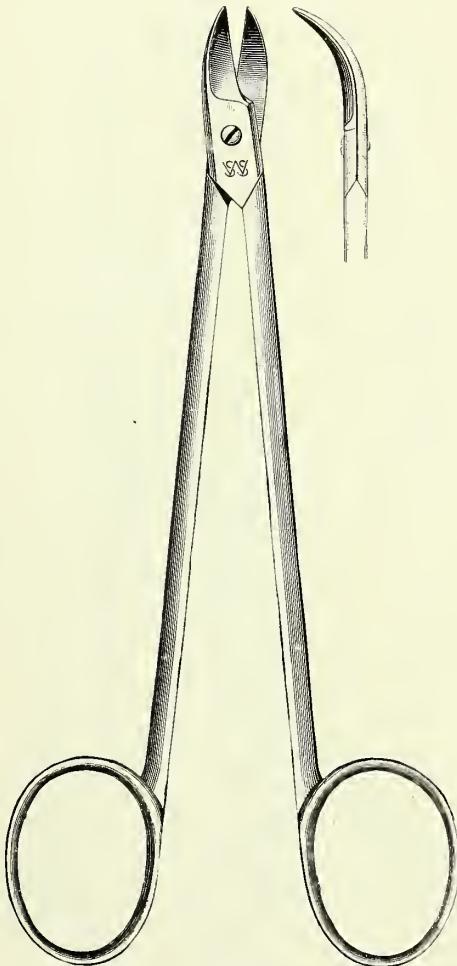
Foil Scissors No. 30, 9 inch, Polished, Blunt	\$2.00
“ “ “ 31, 8 “ Japanned, Pointed	1.65
“ “ “ 32, 8 “ Blunt	1.65
Gum Scissors No. 21, Straight	1.25
“ “ “ 22, Curved	1.50

Gum Scissors

DR. QUINBY'S Pattern



No. 23



No. 27

The most marked peculiarity of the Gum Scissors devised by Dr. H. C. Quinby, of Liverpool, England, is the very decided curve of the blades. This curve, the cutting edges, and the proper proportions of the handles were the subject of careful study and experiment, and the instrument is exactly adapted to its special purpose,—the cutting out of sections of gum overlapping the third molar. In other gum-cutting operations, and as a generally useful surgical scissors, it will be found invaluable.

PRICES

Gum Scissors No. 23, Large, Straight	\$1.25
" " 27, Dr. Quinby's Pattern	1.75

Plate Shears, S. S. White "Full-cut," No. 1

Something like two years ago we entered upon the investigation of Plate Shears, exactly as we had entered upon the investigation of Engine Excavators nearly a third of a century before. We tested thoroughly all the different makes with which we were familiar, but found no perfect shears among them. Some cut well near the heel, others at the point, still others in the middle. Not one would start cutting with the jaws wide open,—at the heel,—and continue to shear straight through to the point. The only way to make most of them cut was to find that part of the blades which would cut the best and use this part with rapid, short strokes, with the plate pushed hard into the shears.

The difficulty was sought and found, but how to remedy it was not revealed until after many models were made and much testing done. It meant a remodeling of forms, a refining and maintaining of curves. Through this we have worked out a form of Shears which will make a clean cut from heel to point, every part of the blades cutting equally well. Snipping with the points can be easily done. Very few shears will do this.

But making blades which would actually shear is not the only improvement we have worked out. The handles also have been re-formed on practical lines. Do you observe how they stand apart, how they have bosses on the finger hold to keep them apart? That formation gives you a better grip, lets you apply greater power on the cutting blades with less exertion of strength.

Try it for yourself. Your most effective grip for transmitting power is not when thumb and fingers are extended nor when they are tightly clenched, but when they are curved like the talons of an eagle seizing its prey. The handles in the Shears illustrated apply this principle. Their widest "open" is about where your grip becomes effective. As they are brought toward each other its power increases, and they come to a stop—the blades closed—while the increase of power is still going on. Thus you get the greatest power as the cut nears the points of the blades, just as it ought to be, and there is no tendency of the blades at any point to push the plate away from them. They bite into it.

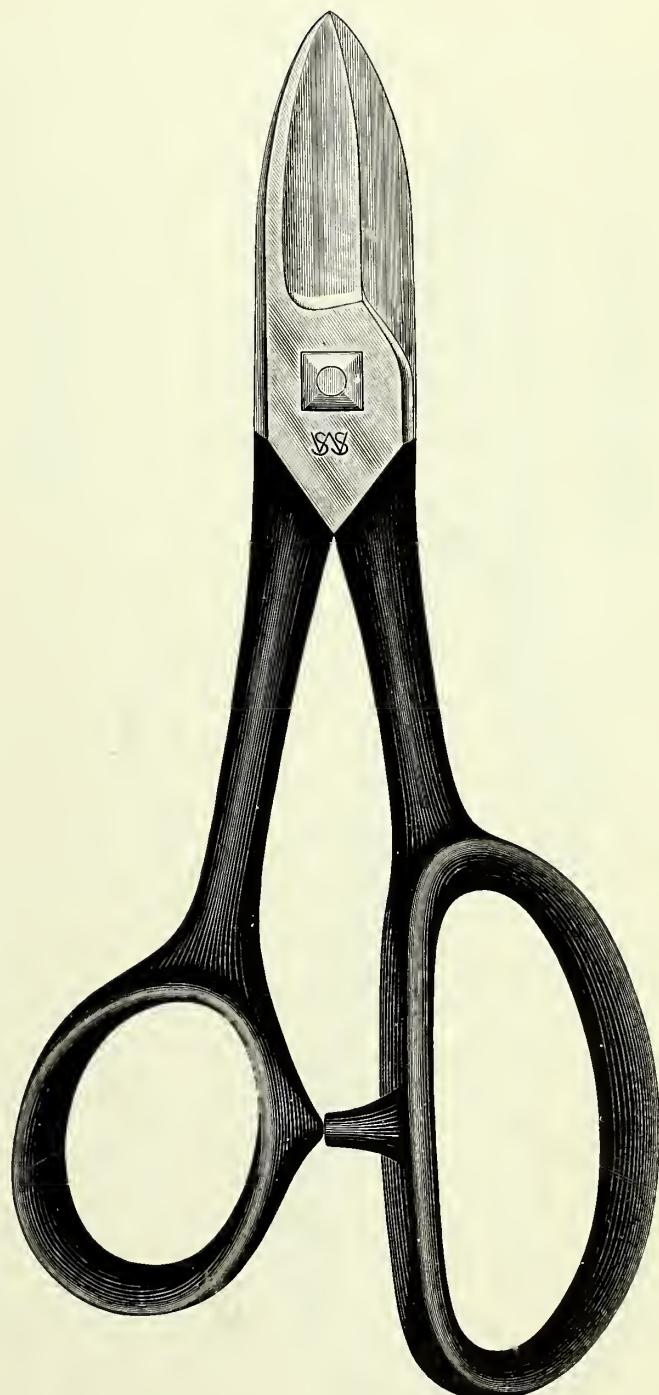
These improved Shears are as much of an advance in their way as were our "Revelation" Burs. They place at the service of the dentist a thoroughly effective, practical tool, one which will do its work quickly and easily. They solve the problem of plate cutting; they lift shears making out of the rut.

Observe the perfect balance of the Shears, giving maximum power; the distribution of metal, giving greater strength with apparent lightness; the tapering points with ample strength.

No. 1, here shown, is the heaviest of the line. It is adapted to cut clasp plate, taking the place of our old Nos. 1 and 2. Nos. 4 and 5, 8 and 9 are for lighter work, especially for crown and bridge workers. They have the same advantages of blade that No. 1 has, and Nos. 8 and 9 have the improved handles.

Carefully made throughout, and every pair thoroughly tested before being put into stock.

Plate Shears, S. S. White "Full-cut," No. 1



Every dentist who uses Gold Plate is interested in what is said, on the preceding page, of these shears. It concerns the means for cutting plate, shows the faults of former devices, and tells how they have been eliminated through an exhaustive study of the entire problem.

We used to think we made very fine Plate Shears; and so we did, according to the standards then known—better Shears than anybody else did, because we paid that special attention to materials and workmanship which is the basis of the superiority of our products. But that the former standards were wrong, we have now demonstrated convincingly.

Plate Shears for Crown= and Bridge=Workers

FULL=CUT PLATE SHEARS Nos. 4 and 5

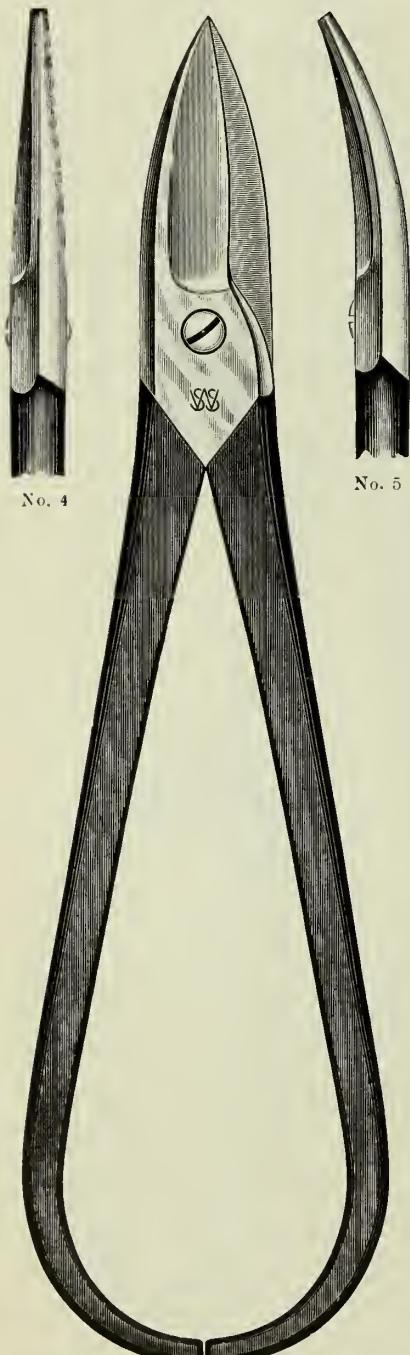
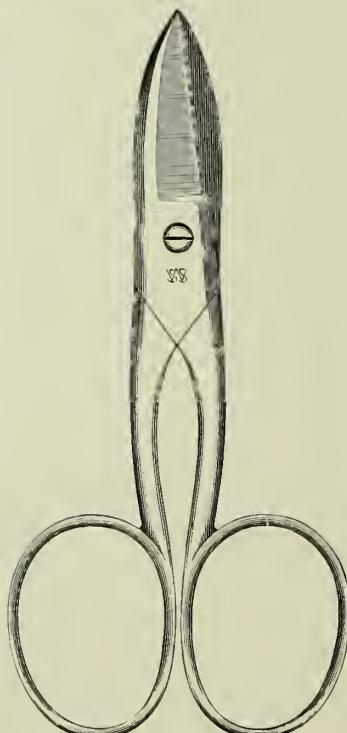


Plate shears Nos. 4 and 5, shown on this page, and 8 and 9 shown on the opposite page, are made on the same line as No. 1 shown on page 71. They are "Full Cut" that is they easily cut plates such as are used by dentists with any part of the blade from the heel to the point.

No. 4 is straight, No. 5 curved.

Prices, No. 4	\$1.00
" " 5	1.15

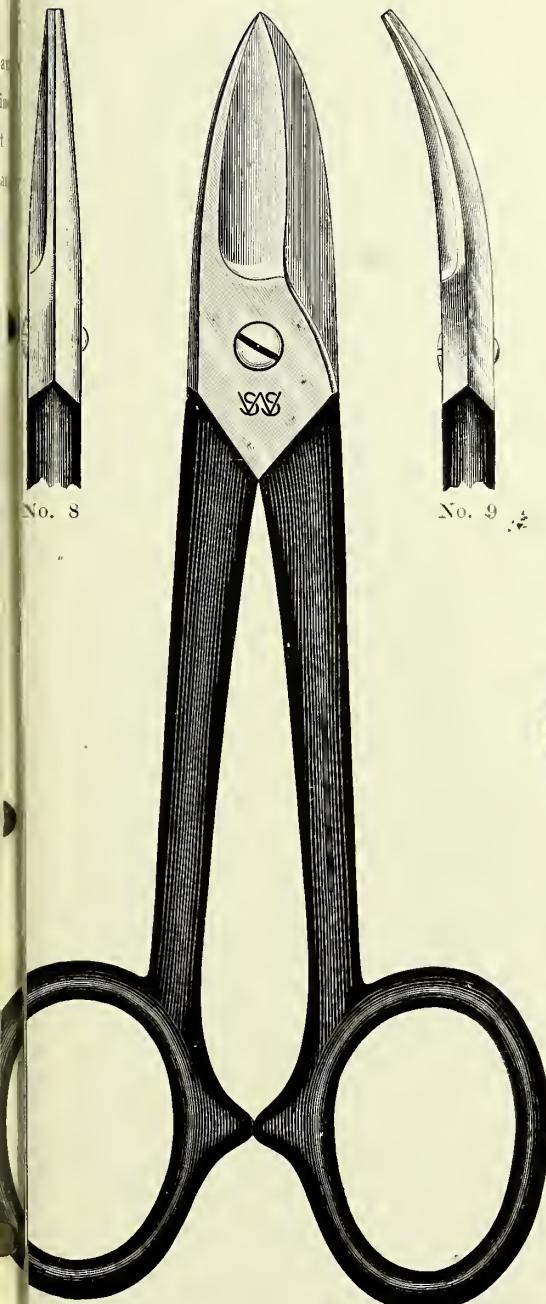
No. 3



The illustration shows the Shears full size. The scissors handles and short blades adapt them to the most delicate work in trimming bands and crowns.

Price	\$1.00
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Full-cut Plate Shears Nos. 8 and 9

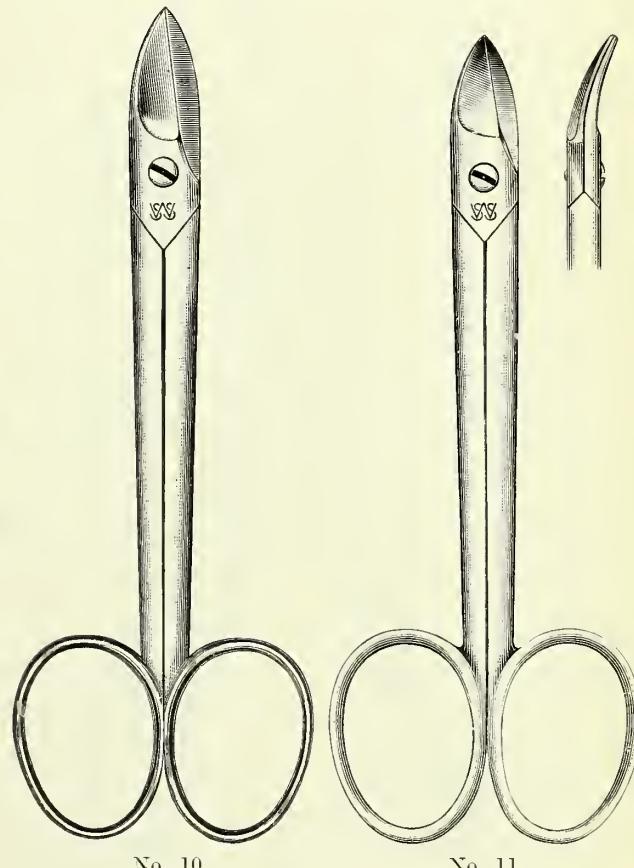


PRICES

8, Straight	\$1.25
9, Curved	1.40

Crown Scissors Collar and Crown Scissors

Pattern by DR. J. G. LANE
Suggested by DR. J. H. BEEBEE



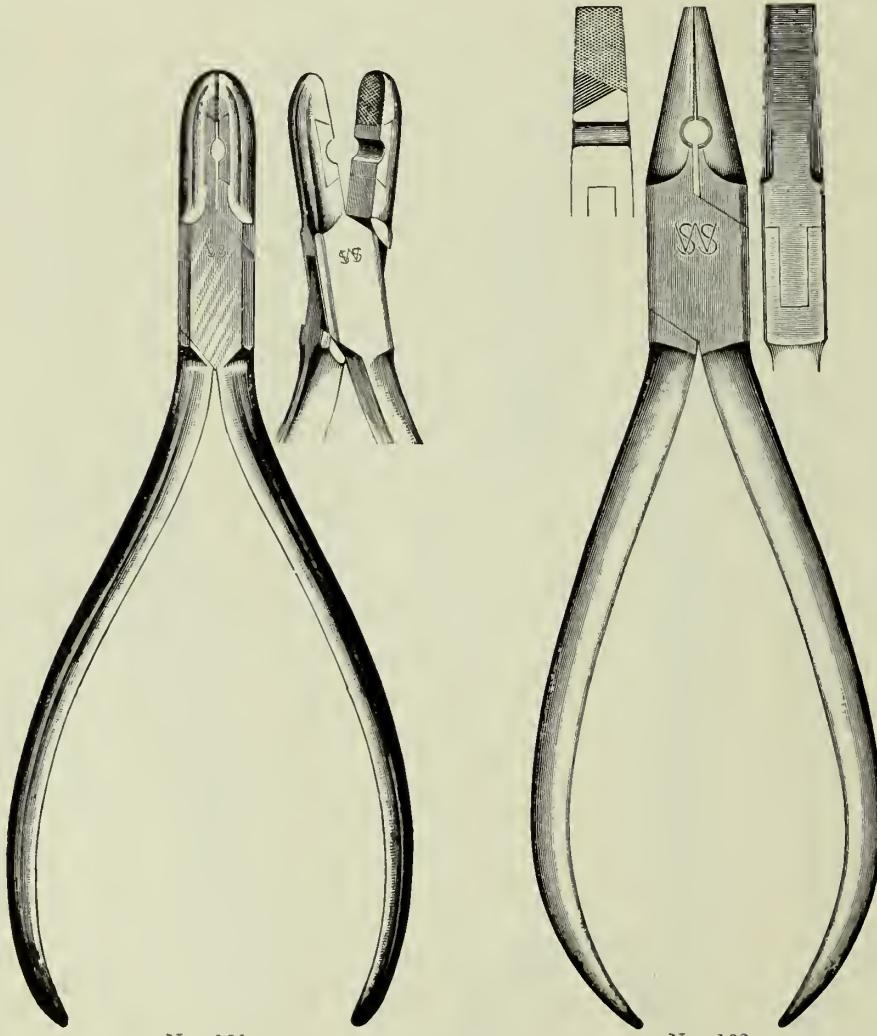
These Scissors were designed for use in making up gold crowns and bridges, for all manner of plate cutting, and particularly in fitting and festooning bands and collars. The relatively short but stocky blades and long handles give great cutting power and ease and delicacy of manipulation.

Price \$1.00

The illustration shows the size, shape, and curved blades of the delicate device designed for scalloping the edges of gold collars and crowns. Obviously the time and gold clippings saved will soon offset the cost of the Scissors. These are also useful for silk or thread ligature cutting, or even gum snipping. Their lightness of structure admirably adapts them for office use, but of course precludes abuse in laboratory work.

Price \$1.25

Pliers for Inserting and Removing Cone-socket Points



No. 101

No. 102

In order to set Cone-soeket Points firmly in the Handles, it is necessary to use more force than can be given with the fingers.

These Pliers are especially adapted for the purpose.

No. 101 is finely finished, and in both jaws are inserted copper plates which prevent the marring of the instruments and give firmer grasp than can be had with the No. 102 Pliers.

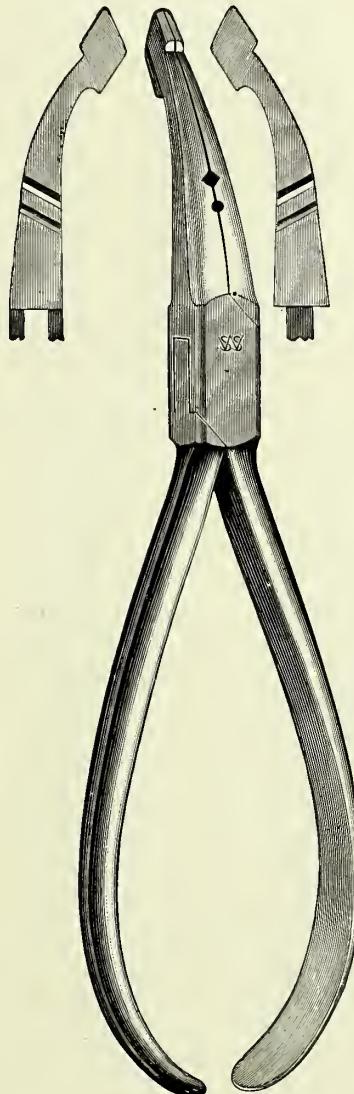
No. 102. A flat-nosed Plier with depressions ground in the jaws.

Price, No. 101	\$1.75
" No. 102	1.20

Angle's Band-forming Pliers

Devised by DR. EDWARD H. ANGLE

Patented September 13, 1898



No. 123

These Pliers are especially designed for pinching or forming the plain bands about the crowns of the teeth in regulating, or to the roots in crowning.

The angle of the beaks and the plurality of operating edges adapt them to forming the seam on the lingual or labial surfaces of teeth in either jaw.

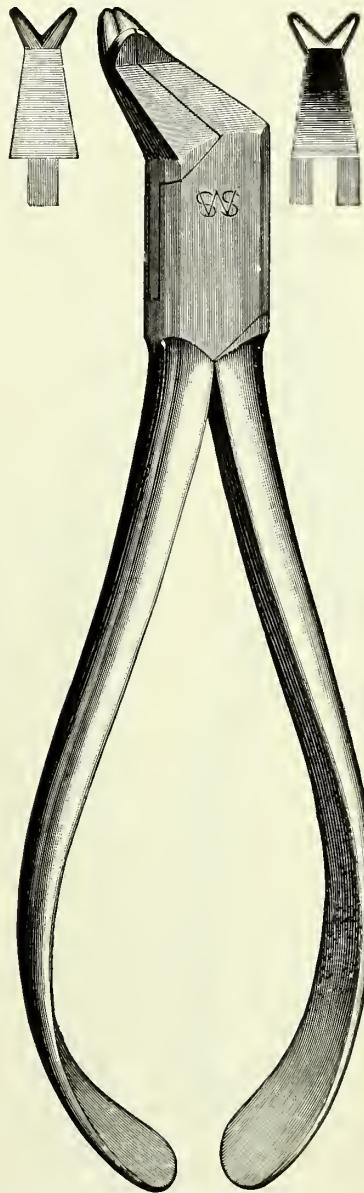
Between the beaks are square and round grooves for holding round and square wire, etc.

Price \$2.80

Angle's Wire-stretching Pliers

Designed by DR. E. H. ANGLE

Patented March 19, 1895



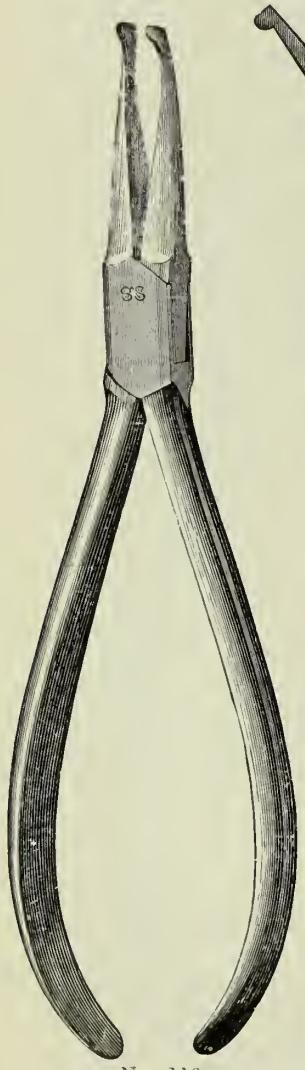
No. 124

Especially for pinching to lengthen wire employed in regulating the teeth. The peculiar form renders application easy in any part of the mouth. A little experience will render the operator skilful, and he will probably be surprised to see how much can be accomplished with them, in the adjustment of light annealed wire. They should not be used on hard or large wire.

Price \$3.50



How's Crown Pliers



No. 110

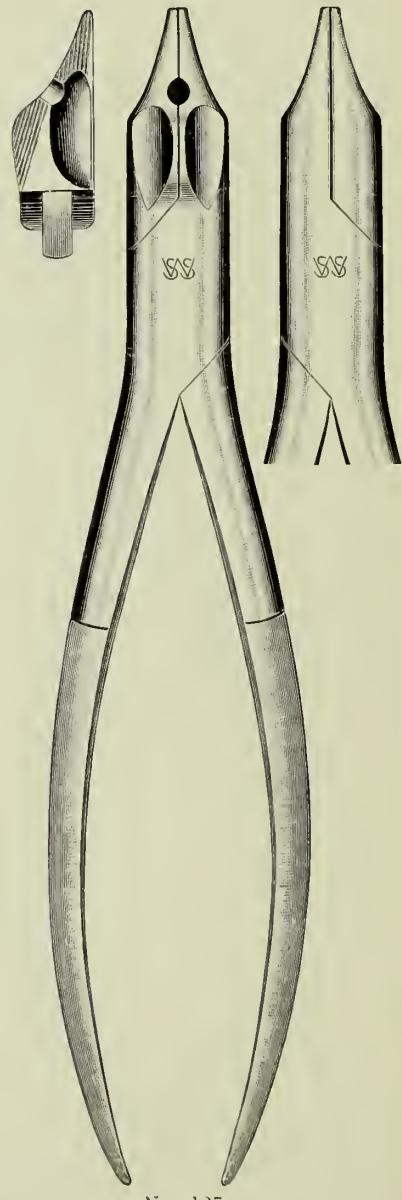
No. 111

Nos. 110 and 111, straight and curved Pliers for bending pins over posts in Dr. How's process of mounting artificial tooth crowns.

PRICES

No. 110, Straight	\$1.60
" 111, Curved	1.75

Pin-roughening, Cutting, and Bending Pliers



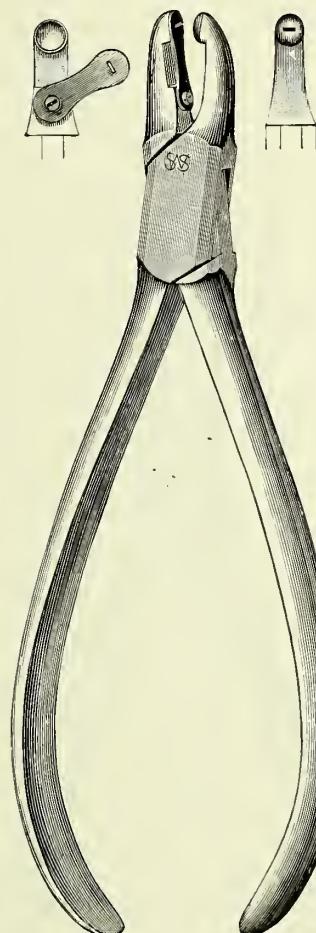
No. 127

Designed for roughening and bending at right angles the pins of plate or long-pin teeth for vulcanite work. An excellent combination tool for wire cutting, post ronghening, or light clasp bending, but unsuited for the heavier work which belongs to plate benders, nippers, etc.

Price	\$2.50
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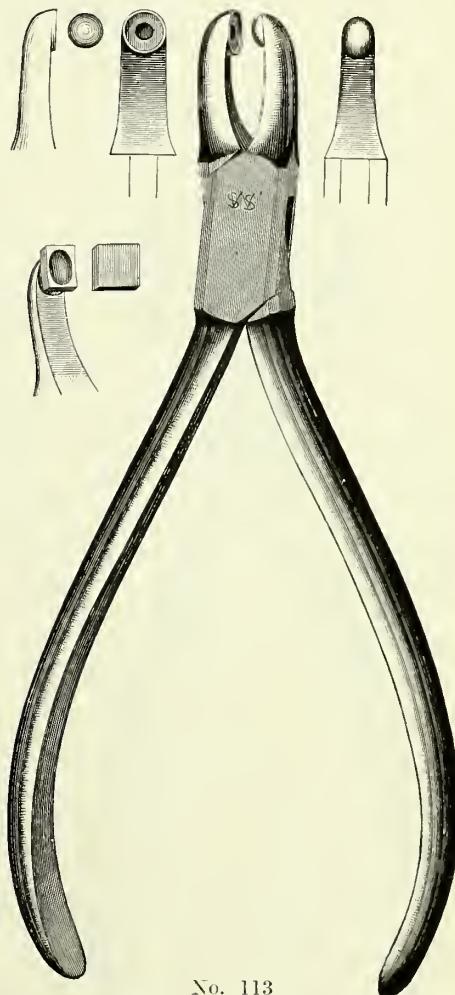
Contouring Pliers

S. S. White, with Punch



No. 112

Dr. Abell's



No. 113

The large sale which these Pliers have had is the best evidence of their value to crown- and bridge-workers. One beak is convex, the other concave to correspond, the faces being calculated for the most delicate manipulation required in contouring collars. Attached to the concave beak is a steel punch which strikes into a depression in the convex beak, by means of which guards or stops are made in the collars to prevent their being forced too far under the gum. The depression being slightly larger than the punch, the metal is not cut through, but merely raised on the side opposite to the punch. When the Pliers are in use for contouring, the punch attachment is swung to one side.

Polished and nickel plated all over, except the punch attachment, which is blued.

Price \$2.00

The special advantage of Dr. Abell's Pliers is the lead seat or matrix provided for the contouring boss. The cup which receives the boss has a recess in its center of the proper size to receive a square of thick sheet lead or pattern metal, or a No. 5 lead shot, which, being pinched hard between the jaws, is crowded into the recess, while the boss forms a seat for itself in the exposed face. This matrix may be given any desired concavity by pressing into it a piece of thin or thick sheet metal.

The forms of the jaws permit the operator to contour a crown very close to the edge without stretching it, or to contour a shell close to and continuous with the stamped top-piece of an Evans Crown, for instance, or to contract a shell without cutting it and without buckling. The inventor has frequently contracted crowns as heavy as No. 26 standard gage. The surface of the crown or collar is unmarred. The shot is easily replaced when worn out. A package of shot accompanies each pair of Pliers. Finely finished.

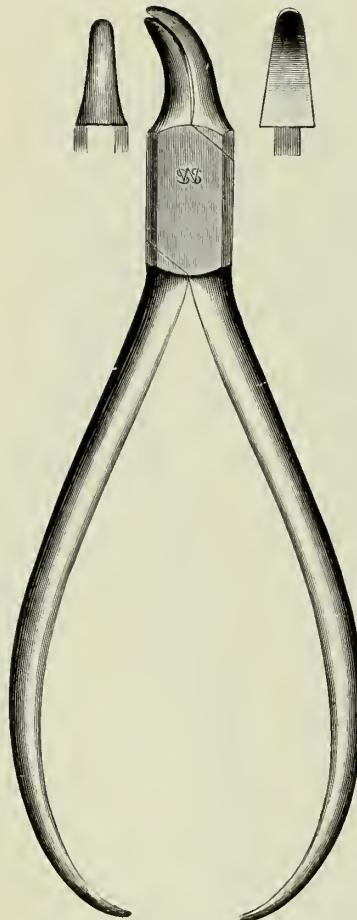
Price \$2.00

Contouring Pliers

CRESCENT

Devised by DR. C. J. REYNOLDS

DR. JOHNSON'S

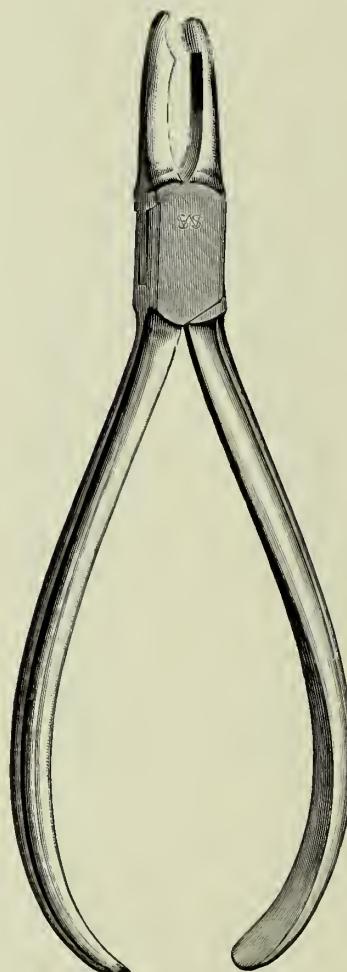


No. 115

This latest improved form of Dr. Reynolds' Contouring Pliers has been proved to be an exceptionally convenient and efficient tool for imparting any desired degree of crown contour, and also for constricting and conforming the cervical part of the crown or band. Simply pinching the band border between the beaks, and at the same time bending the border slightly inward, repeated progressively to the right or left, will reduce the size of the band as desired.

Price \$1.50 **\$1.75**

Price \$1.75

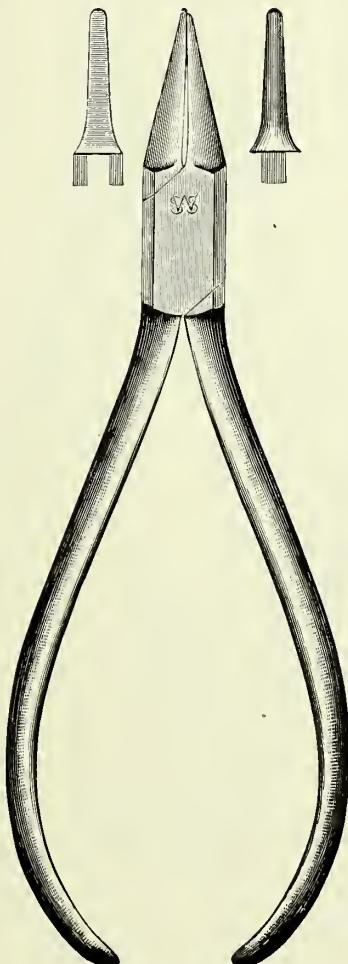


No. 114

One of the beaks of these Pliers is scalloped out to meet an oval boss formed on the interior surface of the other, making an excellent shaper for the gold in contouring gold crowns or fitting bands to roots. The instrument is of neat design, finely finished with smoothly rounded handles.

Collar Pliers

DR. F. A. PEESO'S

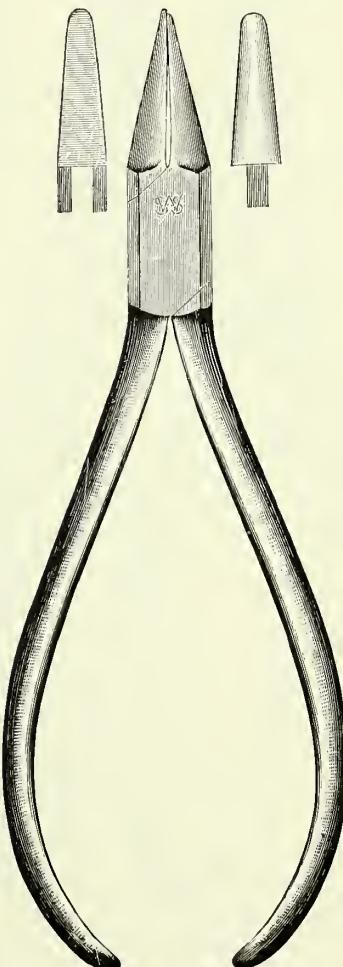


No. 118

This form of Collar Pliers is a modification of the Robinson Pliers, the beaks being narrower, and especially adapted for shaping and fitting the small curves of lateral, lower and bicuspid collars or cap crowns; in fact, collars of whatever size may be formed with them, and the shorter rounded-end beak can be used to impart a considerable degree of contour to a cap or collar. Bridge- and crown-workers will find them very useful.

Price \$1.60

DR. C. L. ROBINSON'S



No. 120

The two beaks of this pair of Collar Pliers are of unequal length, and the inner face of the longer beak is flat, while that of the shorter is rounded off at the edges so as to make it slightly oval. Dr. Robinson claims that "Not only can a band (collar) of any required size for crown-work, from the smallest lateral to the largest molar, be shaped with equal facility, but the drawing in or drawing out of bands for gold crowns (contouring) at any point necessary to give them an artistic appearance as well as useful form can be readily done."

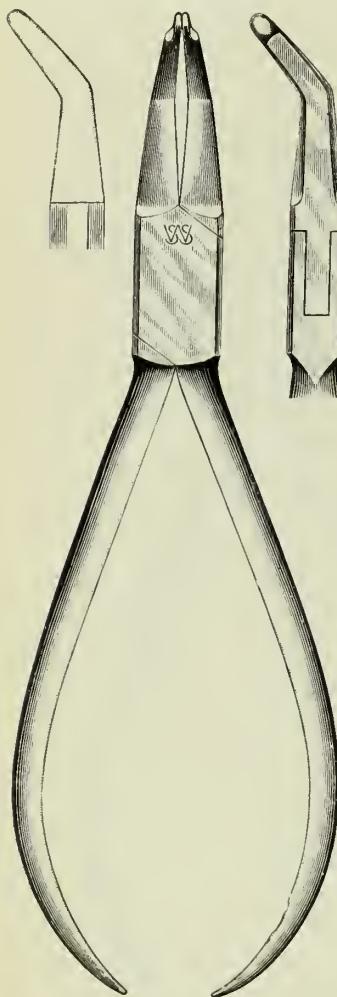
Price \$1.60

Contouring Pliers

Designed by Dr. J. H. PROTHERO

Designed by Dr. HART J. GOSLEE

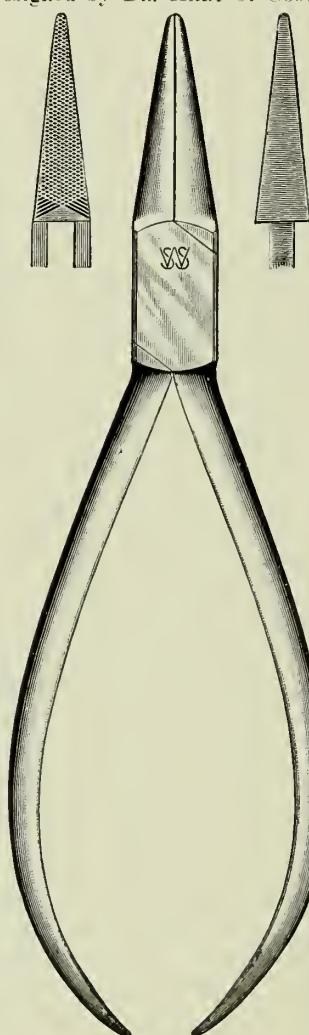
Suggested by Dr. J. D. GORDON



No. 135

The beaks are formed with an angle, by which the manipulating hand is taken out of the range of vision, permitting the operator a view of the work which is being contoured. Rounded contact surfaces permit of the convex contouring of crown bands without marring the axial surface of the band material. Still another advantage is the shaping of the tips of the beaks so that by placing them inside of the band opposite the points where approximal contact is to be made, and opening the handles, the contact desired is easily secured.

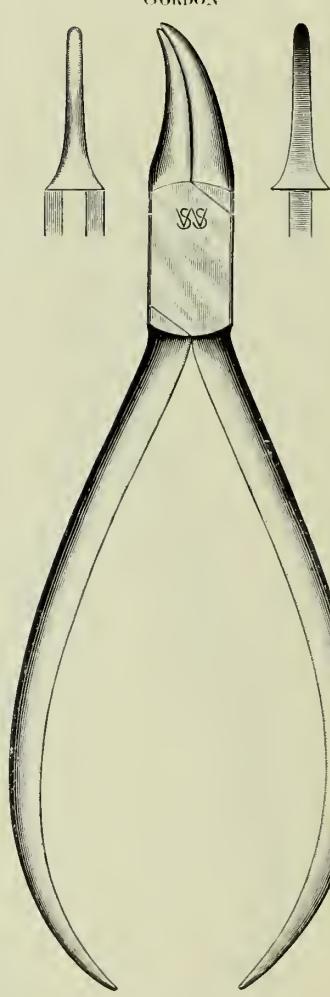
Price \$1.60



No. 136

Dr. Goslee says that, "as the shaping should be done upon the edge of the band before the cusp is attached, all of the necessary and artistic results can be accomplished with pliers the beaks of which are straight, tapering, and come closely together." The Pliers here shown, he says "will meet the general requirements when properly used. The rounded edges and one smooth beak prevent defacing the gold, while the flat surface and one serrated beak, and the tapering form for stretching, add to their general usefulness."

Price \$1.60



No. 137

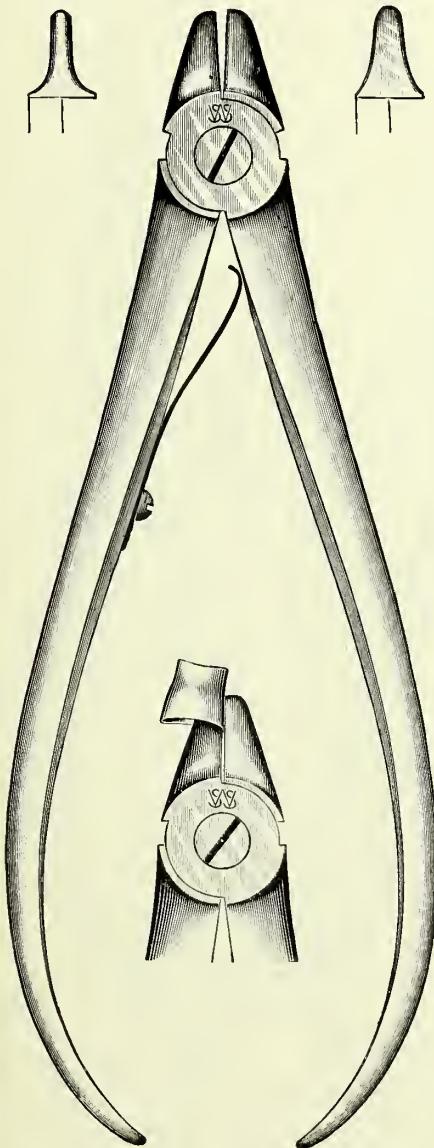
A modification of the Reynolds Pliers is offered in the device here shown. The beaks are made narrower, with slightly less curvature, a conformation found useful in forming convex or concave surfaces in all sizes of collars. Its advantages are well demonstrated in forming the approximo-cervical portions of bicuspid and molar bands to obtain the proper clearance between the teeth at that point.

Price \$1.60

Stretching and Contouring Pliers

Design by DR. FRED A. PEESO

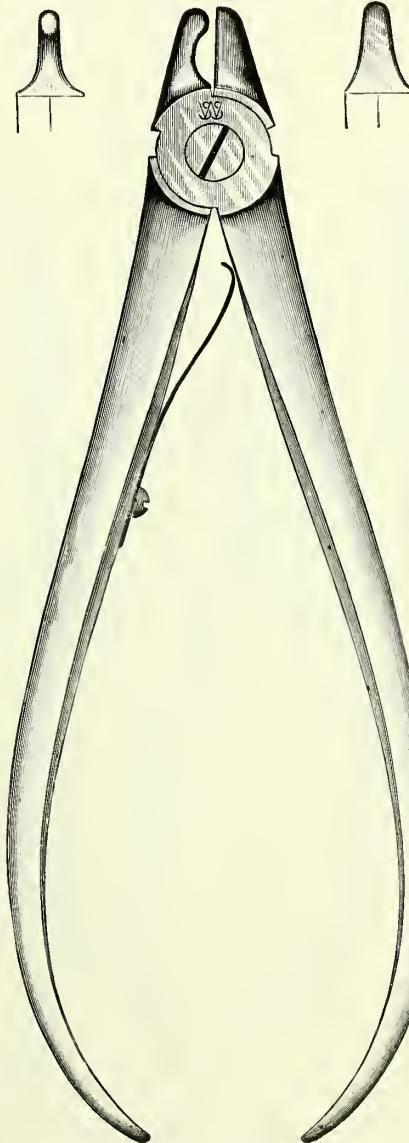
Devised by DR. C. W. BENSON



No. 130

The comparatively great length of the handles of these Pliers enables you to put all the necessary leverage upon the short, strong beaks to stretch the band. One beak has a rounded face, the other is flat and much wider to permit the band to be pinched in any direction. They can be used to shape the band to the tooth, to contour gold crowns, to enlarge the entire circumference of a band (stretch it) if found too small or to flare it to make a full contour. Used with the round-faced beak inside.

Price \$2.50



No. 138

This modification of the Peeso Pliers possesses the same enormous leverage and short, strong beaks, differing from them only in that the working beak is in the form of a ball which makes a rounded indentation in the metal. By means of this a band or crown can be nicely and quickly contoured not by bending, as it is with most contouring pliers, but by actually stretching the metal, as with the Peeso.

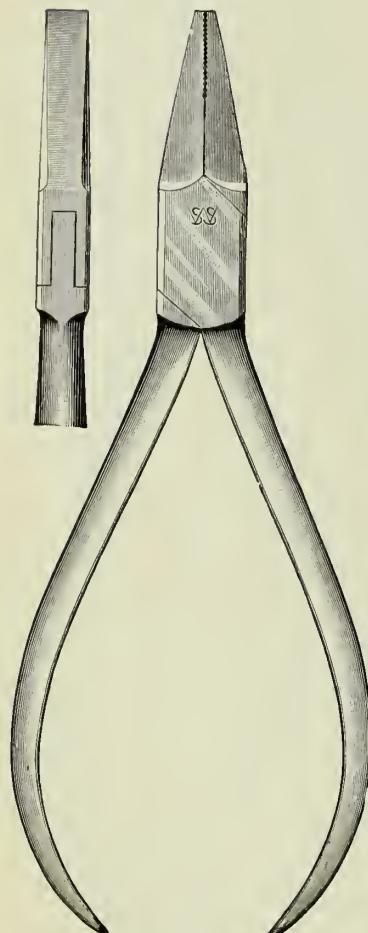
A little practice will enable you to do an astonishing amount of satisfactory work quickly.

Price \$2.60

Flat-nose and Round-nose Pliers

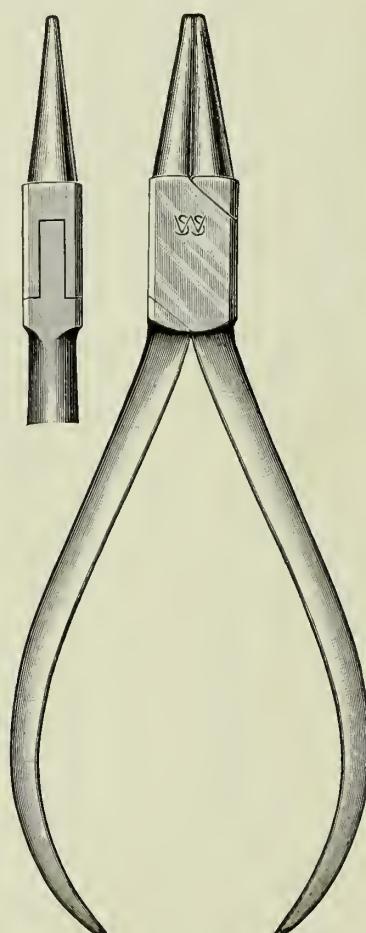
Laboratory and Office

Flat-nose
4½ in.



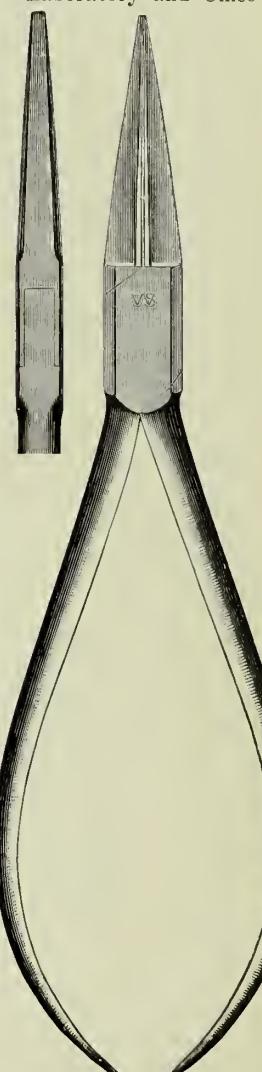
No. 104

Round-nose
4½ in.



No. 107

Laboratory and Office



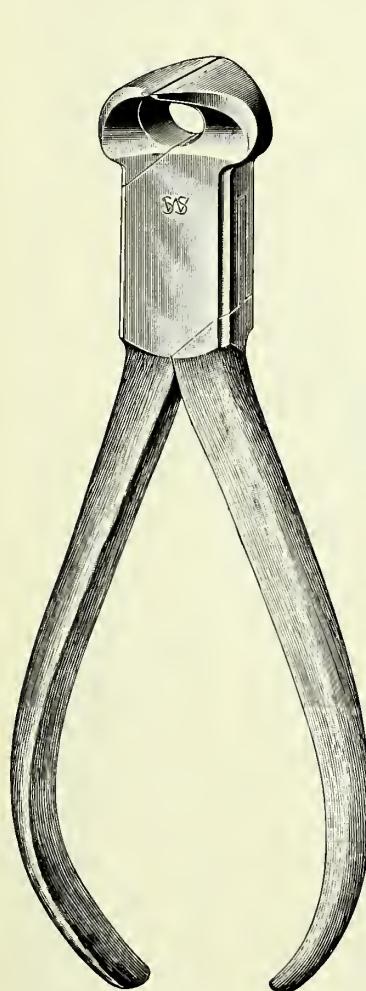
Nos. 121 and 122

The line of Laboratory Pliers made in our factories is of the finest steel, beaks and body finely polished and bright nickelated. The handles are shaped like those of our regular line of crown- and bridge-workers' pliers, draw filed, and finished in unpolished nickel. The finish of the handles gives a perfect grip and affords a neat appearance. No. 121 has serrated beaks, No. 122 smooth beaks.

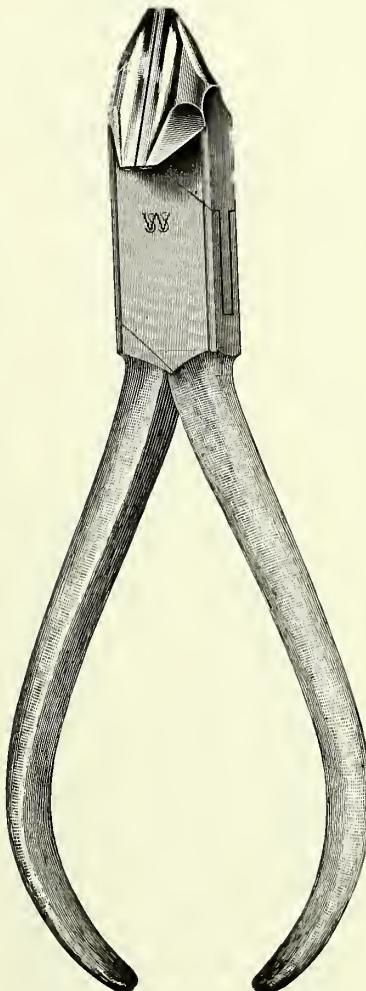
PRICES

Flat-nose Pliers No. 104, 4½ inch	\$0.90
Round-nose Pliers No. 107, 4½ inch90
Laboratory and Office Pliers, Nos. 121 and 122	each 1.50

Wire Nippers



No. 1



No. 3

There is a demand for better Wire Nippers than those made for the general hardware trade. We supply that demand with Nippers, side and front, made in the S. S. White way,—the best we know now.

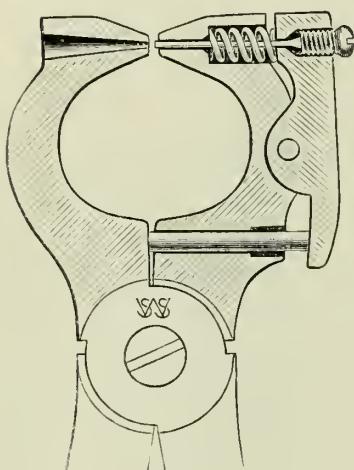
The steel used is selected for the purpose, and the entire tool is carefully forged and finished. The finely made box joints assure smoothness and correctness of action. The cutting blades come together accurately throughout and are tempered for their work. They should not be used to cut piano wire,—nor should any other nippers,—because it is hardened and tempered steel and requires a special instrument. But for their legitimate work, the cutting of the soft steel and brass wires so much used in dental practice, the S. S. White Wire Nippers are unequaled as an effective, durable tool.

Two sizes each of Front and Side Nippers, No. 1 front, $4\frac{1}{2}$ inches; No. 2 Front, 5 inches; No. 3 Side, $\frac{1}{2}$ inches; No. 4 Side, 5 inches.

Nickel plated all over, blades polished, body and handles dull finished.

Price each \$1.50

S. S. White Plate Punch No. 13



The Plate Punch which actually punches a clean-cut hole in any plate used by dentists, and which the instant the grip on the handles is relaxed releases itself automatically.

It repeats these operations—instant punching and automatic release—as fast as you can close and release the handles, with never a hitch or halt in either.

You have no conception of how efficient a plate punch may be till you've had our No. 13 in your working hand and a piece of plate in the other. And it's durable, will last a lifetime; nothing to wear out but the little punch pin, for which a new one can be substituted in a moment. The S. S. White Plate Punch No. 13 is well worth its price.

Price \$5.00

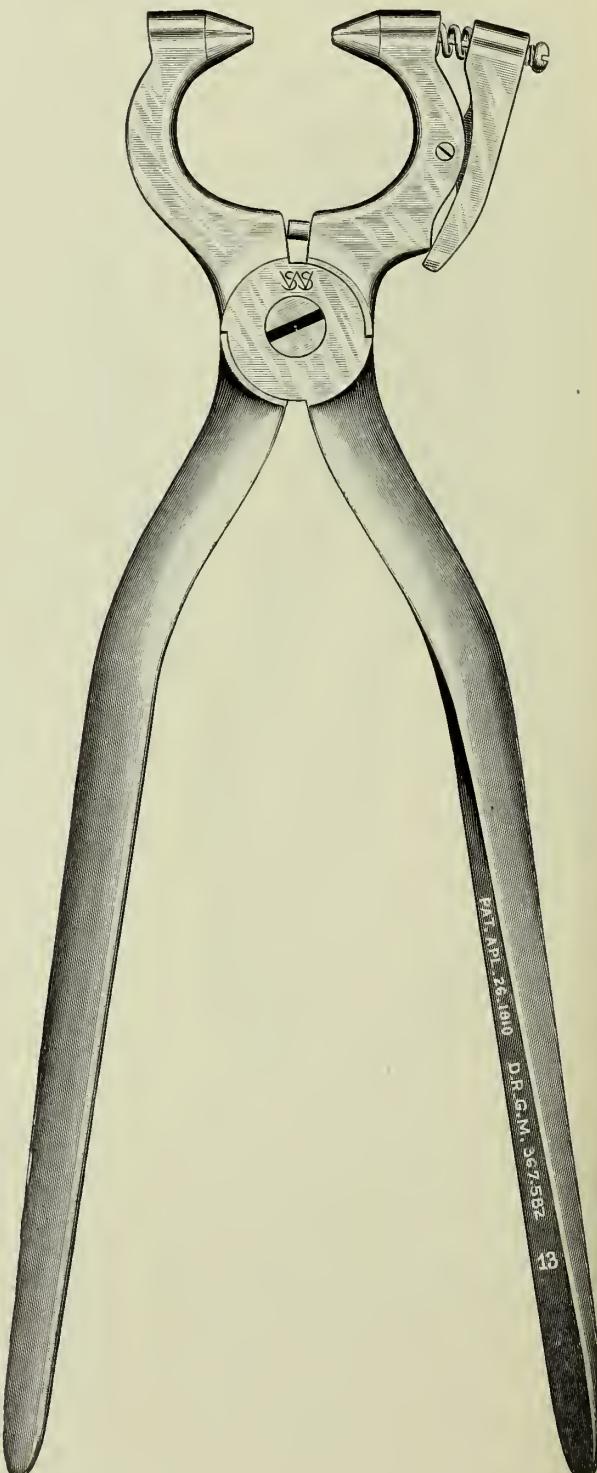
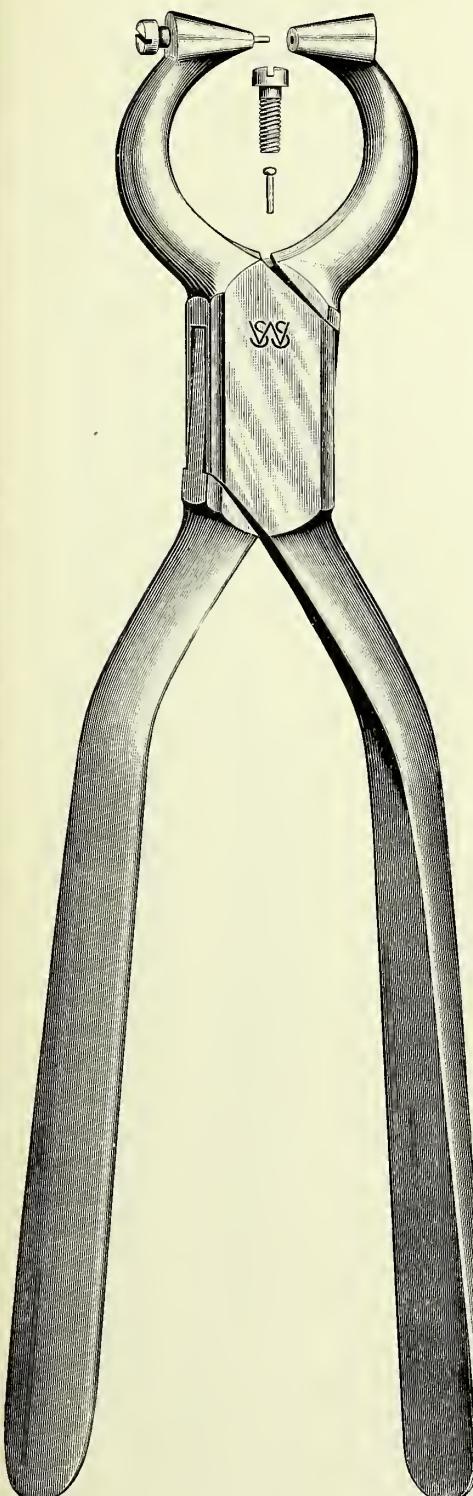


Plate Punch

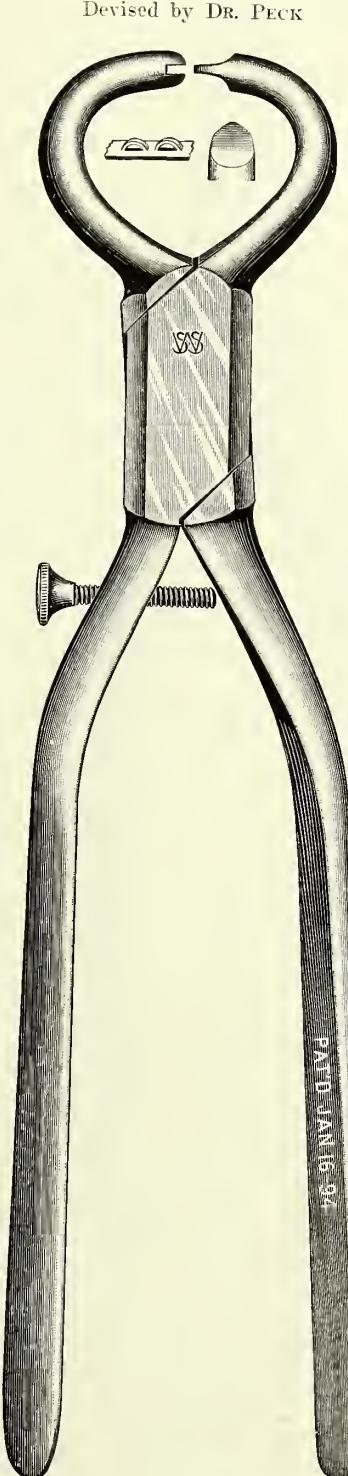


No. 14

Plate Punch No. 14 is similar to our former Plate Punch No. 1, except that the pin is removable. This is a distinct advantage to the dentist, enabling him in case the pin breaks to insert a new one with little cost or inconvenience.

Price \$2.25

Loop Punch



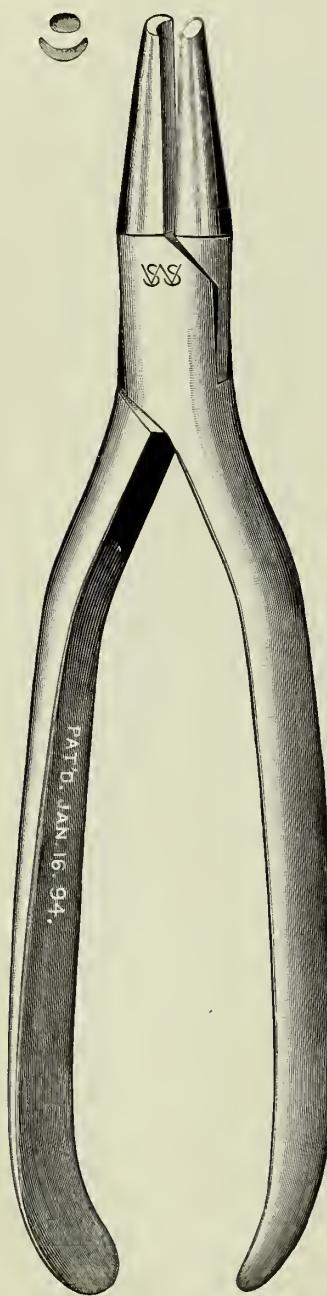
No. 10

Devised by DR. PECK

Various methods have been used for attaching teeth to metal plates with vulcanized rubber. The Loop Punch, the latest device for the purposes, will be found satisfactory. When the flask is closed, the rubber will be forced through the loops, making a perfectly secure attachment. The loops may be made deeper or shallower by the set screw.

Price \$2.25

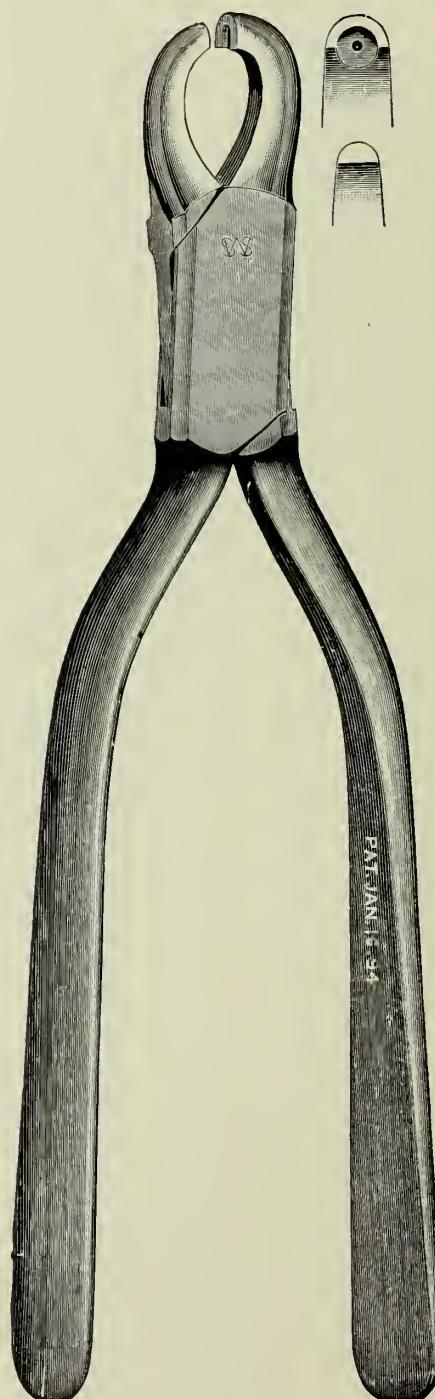
Clasp-bending Pliers



No. 134

Clasp-bending Pliers No. 134 is an improvement on our Clasp-bending Forceps. The oval shape of the beaks and the improved form of the handles are their special features.

Plate Nippers



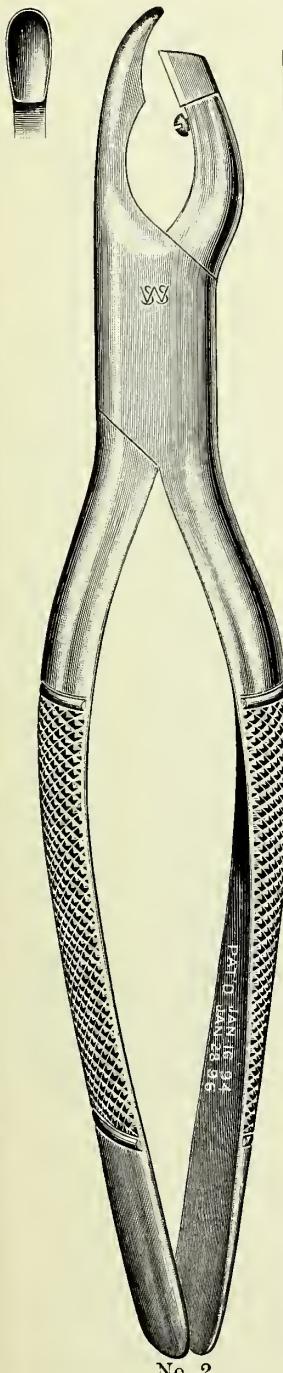
No. 3

No. 134, Clasp-bending Pliers	\$1.75
“ 3, Plate Nippers	2.25

Cap-crown Slitter No. 2

Invention of DR. J. B. MONFORT

Patented January 16, 1894; January 28, 1896



No. 2

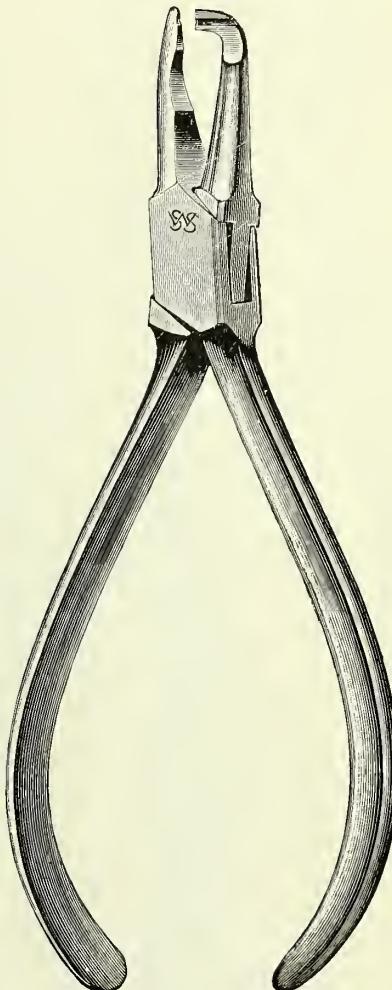
The continued use of the Cap-crown Slitter wears the point of the cutting blade, and occasionally through accident it may be chipped off. In either event sharpening destroys to some extent the calculated relations between the two beaks, by shortening the cutter. We have therefore made the cutter blade adjustable, and held by a screw. In case of a resharpening, this form of cutter blade can be "let out" to restore the balance of power, but its adjustment is in nowise to be disturbed for any other reason. Additional cutter blade points can be bought separately.

Price, Cap-crown Slitter No. 2 \$2.75
" Extra Cutter Blades25

Tooth-pin Bending Pliers

Devised by DR. F. A. GREENE

D. R. G. M. No. 327,337



No. 133

These pliers afford an effective means for bending the pins of long-pin teeth for any purpose. They are especially useful for bending the pins down upon a metal backing, because they grasp the pin in such a way that the bending puts no strain upon the porcelain or its hold upon the pin. After the pin is bent over, it may be pressed down upon the backing without fear of checking the porcelain.

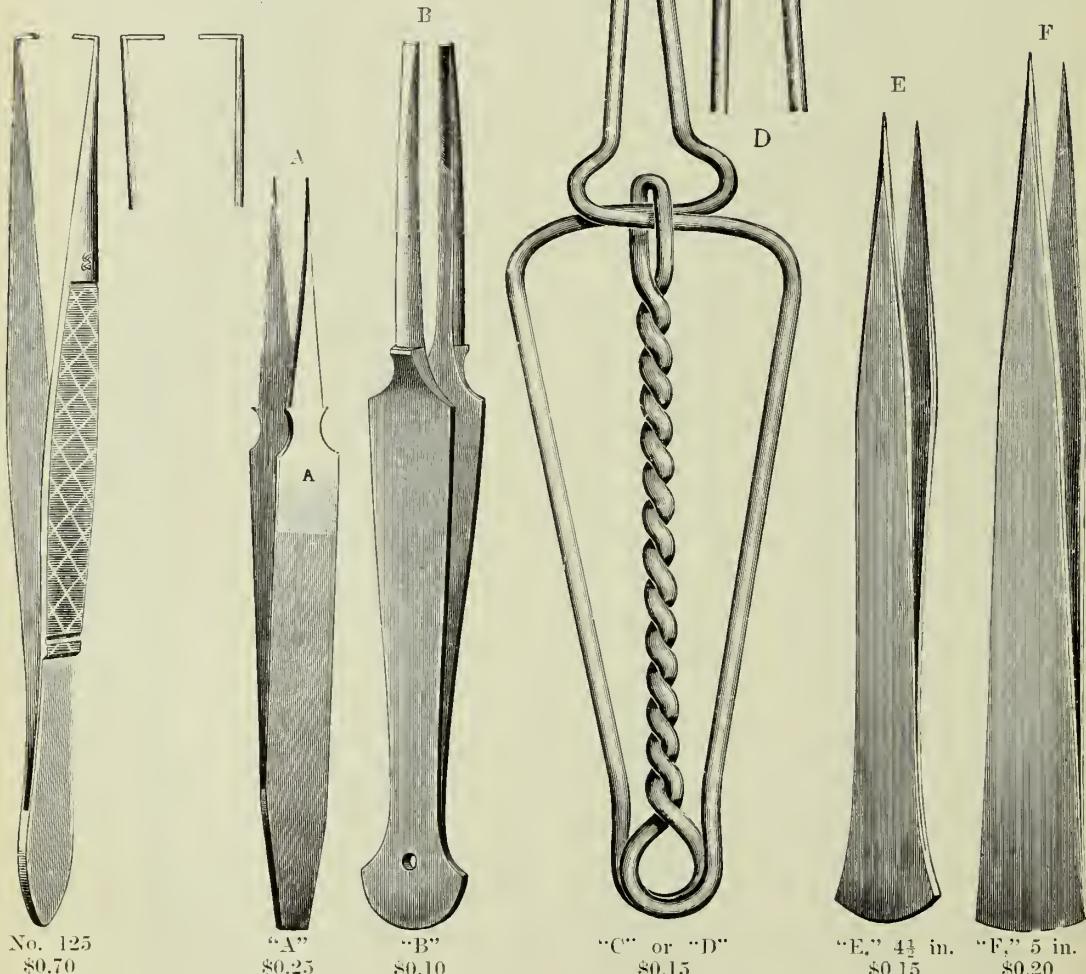
In the use of long pin teeth for vulcanite work, the pins can be readily bent in any direction to form the staples which give the vulcanite its hold.

Price \$1.75

Solder Tweezers

ANGLE'S Band-soldering Pliers

Designed by Dr. E. H. ANGLE



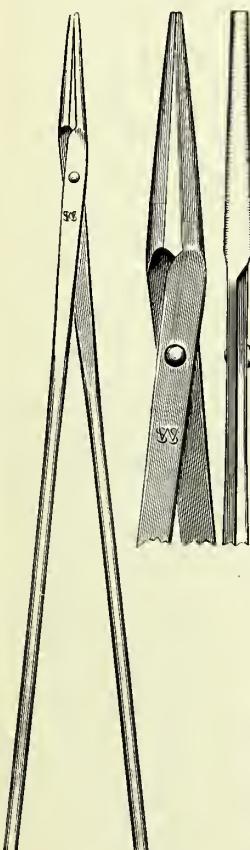
The great advantage of Angle's Band-soldering Pliers will be readily appreciated.

With them pressure is made to bear evenly at the exact point required and away from contact with the solder, while the angle of the beaks renders them little liable to injury from overheating.

Solder Tweezers A, B, C, and D are old and well-known forms. E and F were more recently brought out. They have sharp, delicate points and an easy spring, combined with broad surface for hand hold. They will be found a very convenient addition to our laboratory instruments, particularly for crown-and bridge-workers.

**Solder
Tweezers "G"**

Pattern by
DR. F. S. BELYEA

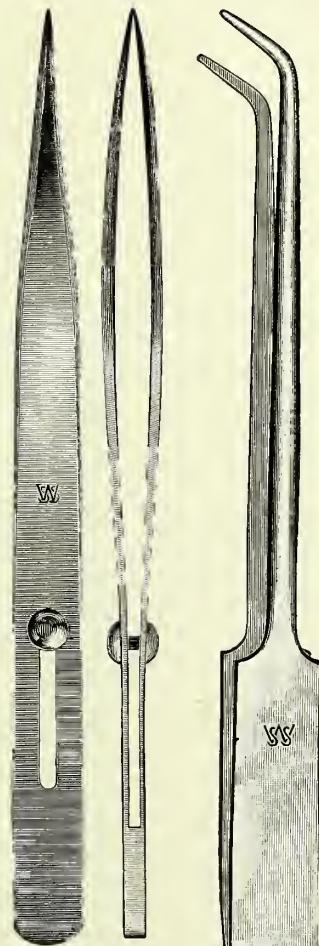


These Solder Tweezers are made long and slender in order to afford extreme delicacy of manipulation. The least pressure at the ends of the handles holds the solder or collar, and the slightest movement of one or both handles releases it. The beaks are shown full size in the side view. The full length is $8\frac{1}{2}$ inches. Dull nickelered.

Price \$0.30

**Locking
Tweezers, Tweezers,
"K"**

"L"



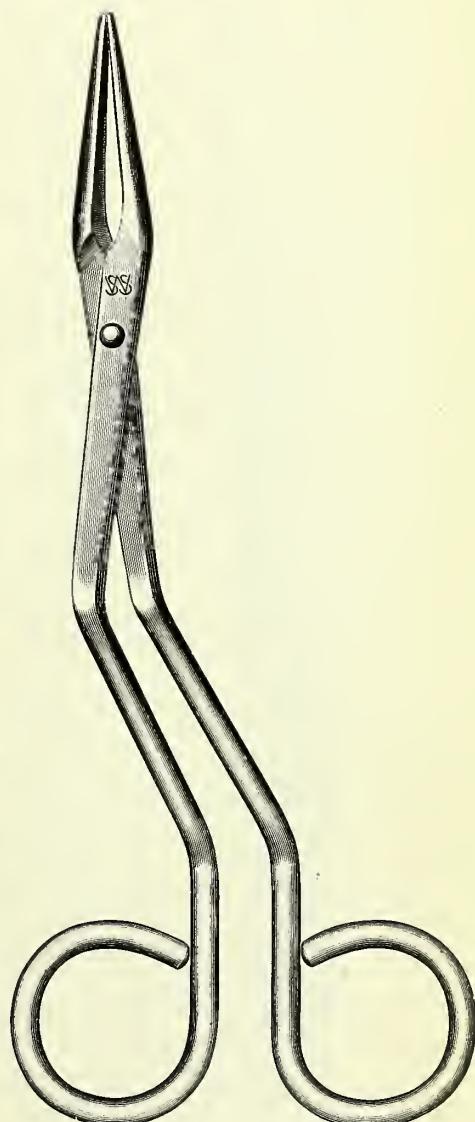
Locking Tweezers "K" are for the convenient handling of inlays or crowns in porcelain work or the holding of bands. They are spring tempered and are provided with a sliding locking pin.

Price, \$0.30

Price, \$0.75

**Solder
Tweezers
"L"**

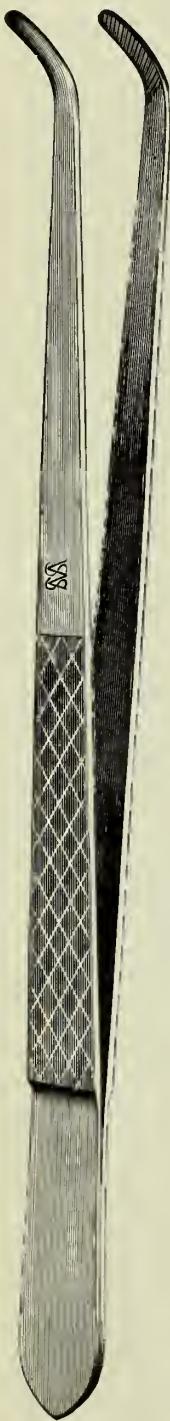
"M"



Designed especially for placing trays containing porcelain inlays, crowns, etc., in the dental furnace and removing them. The bend in the handles allows the hand to do the work without being exposed to the heat from the furnace.

Price \$0.35

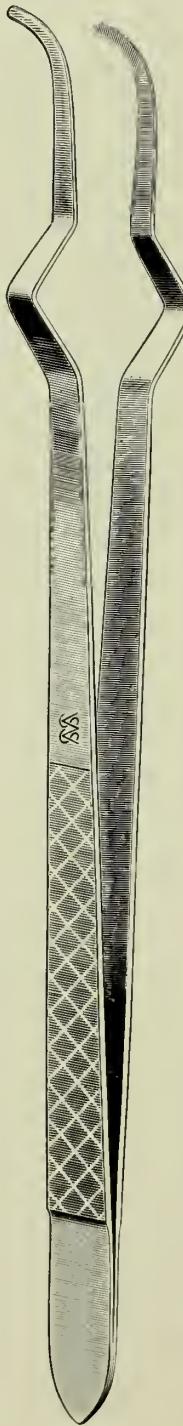
Solder Tongs



The length of the Solder Tongs, 9 and 12 inches, will enable you to handle work without discomfort from the heat. All steel, made strong and durable. Many uses will be found for them in the Laboratory.

9 inches long	\$0.60
12 " "65

Solder and Inlay Flask Tongs



A convenient pair of Tongs for many uses in the laboratory, especially designed for cast work. In addition to the curved beaks for picking up small objects, the bowed portions adapt the tongs for the easy handling of casting rings, flasks and other round objects when they are hot. A recent modification,—the making of bows V-shaped instead of round—gives a four-point hold—thus not only affording a firmer and surer grip, but making it possible to safely handle articles with a greater range of sizes. 12 inches long.

Solder and Inlay Flask Tongs	\$0.80
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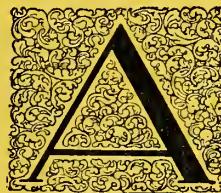
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100 Per Cent. of FIRST QUALITY



COMPARISON of the prices of our products with those of other manufacturers of dentists' supplies, is always welcomed by us. It dispels the idea that because the instruments and appliances bearing our Trade--Mark are admittedly the best made, they are necessarily higher priced than others. The fact is, we set the prices of dentists' supplies. Our prices are based on costs.

Knowing the costs we figure out the selling prices,—not on the "get-rich-quick" plan, but by certain fixed rules,—rules which return a reasonable margin of profit, without which the business could not be carried on. We do not manufacture on the cheap plan. We neither rush things through to reap the quick dollar of a passing "fad," nor do we try to see for how little money we can put out a device that "will do."

We take time enough to make the device as good as we know how; time enough to make tools, if necessary, so that we can reproduce it in unlimited quantities, each a *facsimile* of the other in solid working qualities, in workmanship, and in finish.

This is why our instruments and appliances are worth more. It's easy and inexpensive to imitate them, especially if, as is usually the case, the imitation is like the fellow's razor in the old song, "made to sell." But does the buyer get the benefit of the cheaper production? Not at all. That benefit goes to the imitator. He makes his selling price the same as ours and tells you his imitation is "just as good as White's."

We don't intend to intimate that nobody else ever turns out a good instrument or appliance for dentists' use. Not at all. But we do say that much of the supplies offered and sold to dentists would be consigned to the scrap heap in our factories; and that even of the best made by others you can nowhere get as high a percentage of perfect goods as you can of ours. When you buy \$100 worth of our products you get \$100 worth of first quality,—our system of manufacturing and inspection prevents any imperfect goods finding their way to the sales counters. You cannot get anything like 100 per cent. of equal quality in any other make of dentists' supplies.

The S. S. White Dental Manufacturing Company

MAIL ORDERS

We give special attention to mail orders, both in the matter of care and exactness in sending what is called for and in the prompt despatch of goods. Our rule is to send in every case on the day the order is received and as early in the day as possible.

No matter where you are located, we can do business with you, either from headquarters in Philadelphia or from one of our Branch Houses, and do it promptly and satisfactorily. Such service, based upon intelligent and carefull attention to detail, backed up by ample stocks of goods, is yours for the asking.

We cordially invite correspondence relative to any requirement of the dental office or laboratory.

Our Branch Houses are so situated that there is scarcely a dentist in the United States who is not within twenty-four hours of one of our depots. In each of them will be found not only a full stock of goods of our manufacture, but an active and efficient corps of assistants who are ever zealous to give the best and most intelligent attention to your wants.

The motto of our retail mail order department is, "Do it Now." We realize that our customers' interests demand promptness, and we are resolved that they shall not complain of its lack.

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